Lettsomian Lectures

ON

SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

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MR. PRESIDENT AND GENTLEMEN,—My first duty is to thank you, and I thank you very sincerely, for the honour you have done me by appointing me your Lettsomian lecturer. But being profoundly sensible of the fact that the honour entails responsibility I feel bound to tender an apology for the temerity of which I have been guilty in choosing for my subject a disease of which my experience has been small by comparison with that of some of my auditors and which has been so well discussed from different points of view by my predecessors—Dr. Broadbent, Dr. Gowers and our distinguished President. My excuse is that while on the one hand my choice was made hastily and without due consideration, on the other hand syphilis is a disease of vast and ever-growing interest. It is one of which I have seen a good deal in its constitutional forms and to the study of which I have given time and thought, and I propose to treat of it mainly in its relations to the nervous system and from the clinical standpoint, and by the discussion of cases that have come under my own observation and have been interesting or instructive to me. I trust I shall not be deemed irrelevant or tedious if, before entering on my special theme, I venture to place before you a brief statement of the views I entertain with respect to the pathology of syphilis. I do not pretend that these are in any sense novel. Still it seems to me that it may be convenient and conducive to clearness of apprehension if, in dealing with this complex and protean disorder, I begin with such a sketch of it as will serve to indicate the lines of thought which will run through my lectures, to define my position in regard to the cases which I shall bring under your notice and to obviate the need of subsequent explanatory interpolations. I regard syphilis, as I suppose all educated medical men do at the present day, as a specific infective disease due to the invasion and proliferation of specific living organisms and as having manifest relations to other specific infective diseases, but more especially perhaps to small-pox and the exanthemata, to tuberculosis and leprosy and to malignant neoplasms such as cancer and sarcoma.

The clinical history of syphilis is briefly as follows:—

1. At the spot on which the disease is inoculated a hard tubercle is slowly evolved and almost coetaneously the lymphatic glands next above it become enlarged and indurated, both probably attaining their full development, without any attendant constitutional disturbance, in the course of from six to eight weeks. These phenomena collectively constitute the first stage of the disorder, or primary syphilis. 2. The disease may come to an end at this point; but usually, and in the natural course of events, between six and eight weeks after inoculation constitutional symptoms almost suddenly declare themselves: a febrile rise of temperature takes place, a rash appears over the skin and fauces, and other tissues and organs not improbably become equivalently affected. This stage of the disease usually varies in duration from a week or two to several months, but occasionally lasts much longer, and may even recur from time to time for several years. It corresponds to the generalisation of the syphilitic poison and of its effects and is known as secondary syphilis. 3. With the subsidence of this stage the disease itself in most cases comes to an end; but not unfrequently—sometimes while the secondary symptoms are yet in progress, sometimes shortly or immediately after their disappearance, sometimes after an interval of many years, and may be during an interval of apparently excellent health—a further series of phenomena manifest themselves. These are the tertiary symptoms and constitute what is known as tertiary syphilis. The lesions of this stage, unlike the rash of the second stage, are for the most part unsymmetrical in their arrangement, originate as it were capriciously in different organs, or it may be in only one, and tend to spread locally. They are essentially of the same nature as the primary chancre and result for the most part in grave and irreparable destruction of tissue. 4. Further, syphilis is often transmitted from one or other of the parents, or from both, to the fœtus, either *ab initio* or in the progress of its development, or at the time of birth; and thus the child is born infected with the virus of the disease, which sooner or later reveals its sinister presence by the evolution of morbid phenomena which correspond to those of the secondary or tertiary stage of acquired syphilis in the adult, but present marked special peculiarities. This is known as congenital syphilis.

I will now briefly compare syphilis severally with small-pox, tuberculosis and cancer. 1. The resemblances between syphilis and small-pox are obvious, especially if we have regard to small-pox caused by inoculation. In both diseases specific lesions appear at the points of insertion, and are attended with concurrent specific affection of the neighbouring lymphatic glands; in both, after the lapse of fairly definite periods of time, during which as a general rule the patient's health remains unimpaired, characteristic constitutional disturbances almost suddenly arise; and in both, after a longer or shorter time (supposing the patient does not meanwhile die), the constitutional symptoms subside and health tends to be restored. Furthermore, in either case the disease proves to be in a greater or less degree self-protective; and in either case it may be imparted by the mother to the fœtus. But there are also striking differences; the most important one from my present point of view having relation to the degree and quality of the protection which they severally afford. In the case of small-pox the specific virus at the end of a few weeks disappears absolutely from the system; and not only is there left behind no tendency to relapse or recrudescence of the disease, but also the patient enjoys almost absolute immunity from subsequent attacks on re-exposure to contagion. That syphilis is also in some sense self-protective is proved, not only by experiment and observation, but also by the fact that the secondary stage tends to, and often does, subside spontaneously; but, on the other hand, relapses are not uncommon, and, what is far more remarkable and distinctive, notwithstanding the subsidence of secondary symptoms the specific poison of the disease is apt to lurk in the system, dormant yet potential, and ready, under conditions as yet unknown to us, to become again aggressive and to cause serious, though for the most part localised, outbreaks.

2. The relations of syphilis to cancer seem to me quite as striking as those of syphilis to small-pox. We do not at present know whether the cause of cancer is a specific parasitic organism or whether it is a specific organism evolved out of the living tissues of the sufferer. We know, however, that the disease is specific; that having once appeared in any spot its subsequent behaviour is that of an aggressive parasitic disease; that in the natural order of events the lymphatic glands next above the primary tumour become the seat of growths identical with it; and that subsequently the disease becomes generalised and tumours appear from time to time in various parts of the body, until at length the patient succumbs. The differences are, mainly, that we have as yet no sufficient grounds for believing that cancer originates in contagion or is derived from without; that its generalisation is not, so far as we know, attended with sudden febrile disturbance and widespread or symmetrical distribution of specific lesions, but that rather it resembles in its progress the tertiary period of syphilis. Another point of difference is that while at the point of primary inoculation of syphilis a single chancre only arises, in cancer the disease spreads locally, partly by continuous invasion, partly by the development of outlying nodules. It is interesting to note, however, that tertiary syphilis shows the same tendency to local spread.

3. Now as to syphilis and tubercle. The lesions in both diseases are what pathologists term "granulomata" and are often remarkably alike in appearance—as, for example, tuberculous and syphilitic tumours of the brain, tuberculous and syphilitic tumours of the lymphatic glands and lupus and certain cutaneous syphilides. Tubercle, like syphilis, is an inoculable disease, may undergo generalisation, and may remain latent in certain parts of the organism with the liability to unexpected and sudden recrudescence. Its inoculability is proved by experiment on the lower animals and even by the frequent inoculation of Peyer's patches through the swallowing of infected sputum from the lungs. At the same time the disease is spread in the majority of cases by

means of infected air or food. That the contagium of tubercle is capable of generalisation, as are the contagia of small-pox and syphilis, is shown in the common production of general miliary tuberculosis by inoculation of the lower animals and by the cases not unfrequently met with in the human being in which patients die as of an acute fever in consequence of the nearly simultaneous development of miliary tubercles throughout the organism. But, on the other hand, these are exceptional cases, and tubercle is to a large extent a local disease and remains localised. This tendency to localisation is observed in the case of lupus, which for years may continue to spread over the skin and yet never be followed by tuberculosis of internal organs, in the case of scrofulous glands in the neck and elsewhere, in the case of tuberculous peritonitis and even in the case of ordinary pulmonary phthisis, in each of which the disease may be, and often is, limited to the organ primarily affected. Still, in all such cases there is the possibility of generalisation; and we often meet with abundant evidence of its supervention. The tendency of tubercle to become quiescent, with the potentiality of assuming an aggressive character after some indefinite period, is not uncommonly illustrated in the course of clinical experience. Thus we may find an apparently effete tubercular mass in the lung become the centre of a swarm of miliary tubercles and at the same time the source of a fatal outbreak of tuberculous meningitis; or an old tuberculous kidney, which had long ceased to cause symptoms, the apparent centre of an explosion of tuberculous mischief.

It is obvious then that, while syphilis in its case-history has close resemblances to various other diseases, it has striking characteristic features of its own which distinguish it from all others, and especially that all its different stages do not correspond to all the different stages of those diseases to which it seems most closely allied. Further, syphilis, like all other specific infectious diseases, retains its specific quality throughout its whole career. In all its stages it is still syphilis, and the specific lesions of its primary, secondary and tertiary stages, as also those of the congenital form of the disease, are all irritative or inflammatory growths determined by the actual presence in them of the specific living organisms which are its cause. Again, syphilis, like all other such diseases, has a specific proclivity to attack certain tissues and organs in preference to others, a proclivity which is largely determined by relative suitability of soil. And I take it that the differences in this respect which distinguish the secondary and tertiary stages are due simply to modifications in this suitability which have resulted from the protective or modifying influence exerted over the tissues during the former of these stages; and further, that the distinctive features of inherited syphilis are due in different degrees to the operation of the same cause, to differences of vulnerability of the fœtal tissues as compared with those of the adult, and to interference with the developmental changes which are going on in early life.

It is very important for the accurate delimitation of syphilis to bear in mind that it, like other diseases, and indeed more than most, is apt to be complicated and obscured by other disorders and to be followed by sequelæ which, though having no specific connexion with it, have been largely—and still are sometimes—regarded as essential parts of it. Thus formerly, and even in my own early days, before antiseptic treatment had been introduced and when cases of venereal disease were aggregated in special wards, erysipelas, phagedæna and hospital gangrene were frequent accompaniments of primary syphilis; and even now such complications are not uncommon. But there is no doubt that these are not truly syphilitic, but are due simply to the accidental inoculation of the local sores with other pathogenic organisms. Precisely similar accidents are apt to attend the so-called natural cow-pox as it appears in the cow, and hence the local lesions in that affection not uncommonly present much virulence of inflammation—a phenomenon which has misled scientific anti-vaccinationists into the belief that the original cow-pox was a virulent and untamed malady, instead of being, as pure inoculations prove it to be, a mild and comparatively insignificant disorder; and that when similar accidents attend ordinary vaccination they are due to the tendency of cow-pox to revert to its supposed original malignancy. By sequelæ I mean not lesions arising out of syphilis and still harbouring the specific contagium and capable therefore of rekindling or spreading the disease, but morbid conditions due to damage inflicted on regions or tissues by the direct influence of the specific poison, but remaining over as it were after the specific element has died out. I refer to such conditions as lardaceous changes in various organs, damage inflicted on the bones of the head and nose, on the eyes and ears and probably also a constitutional weakness of certain tissues, rendering them unduly liable to degenerative and other changes and to the influence of other morbific poisons.

Before completing this introductory part of my lectures I should like to make a few remarks on the communicability of syphilis. So far as we know it is only imparted by direct inoculation, and is contagious therefore in the restricted meaning of that term. At the same time the contagium of the disease is presumably an extremely minute living organism and infests the specific sores and their discharges; and it may be worthy of consideration whether it might not under certain conditions—as, for example, when the mouth and throat are the seat of disease—be communicable by the breath or through the air. There is no doubt that we meet with cases of constitutional syphilis the source of which appears to be inexplicable. That it is usually imparted by inoculation of the sexual organs is in a sense an accident, due largely to the fact that the primary sore is not in all its stages necessarily a cause of serious discomfort to its owner or preventive of sexual congress, and that in the act it becomes freely applied to a delicate, readily inoculable mucous surface. If the local manifestation of cow-pox extended over as long a period as a chancre does and were attended with as little intensity of inflammation there is no reason why cow-pox might not be perpetuated as a venereal disease.

Judging from the analogies afforded by other infectious febrile disorders, and from pathological observation, it may be assumed that the syphilitic virus accumulates, not only in the primary sore and indurated glands, but also in all the secondary lesions, including those of the skin and mucous membranes and in the localised growths of the tertiary stage, and that equally from all of these successful inoculations might be made. It may be assumed also that during the secondary stage, when the virus is being distributed by the blood, this fluid and tissues which are not liable to be, or are not, the seats of specific implication are also infective, though, for obvious reasons, much less potently and much less certainly infective than are the parts wherein the virus has taken root and is growing. During the primary stage, however, and during the period of quiescence which often separates the secondary from the tertiary stage and even during the continuance of tertiary symptoms, the blood and tissues not specifically affected probably remain innocuous. It is of course indisputable that, during its primary and secondary stages, syphilis is virulently contagious; and the explanation is obvious. But it is, I believe, largely held that syphilis in the tertiary form is not contagious. This I cannot admit. I am free to acknowledge that syphilis in this period of its career is far less frequently communicated than it is at any other stage; but this is due to the fact that the specific lesions are at this time, as in the first stage, localised, and for the most part so localised (often in internal organs) as to afford little if any opportunity for successful inoculation.

I will venture to quote briefly two cases which, though perhaps they may not be generally regarded as absolutely conclusive on the point, seem to me to constitute a weighty indictment against the innocence of tertiary syphilis. The first was a very sad case. A young medical friend of mine, a man of undoubted respectability and honesty, married a young lady of unimpeachable character and wholly free from taint of inherited syphilis. This was three or four and thirty years ago. He was at the time, and had been for some years previously (during which time I had known him), in excellent health. But I was aware that during all this time one of his testicles had been enlarged, and occasionally had troubled him a little. I do not think he even consulted me about it or that I ever saw it; but he spoke of it occasionally, and attributed it to an injury he had received some years before while riding. His wife, shortly after marriage, became *enceinte*; and when about half the time of pregnancy had been accomplished she became covered with an abundant and quite typical secondary syphilitic rash, which subsided in the course of two or three months under specific treatment. The fœtus died in utero about a month before the full time, and was born with abundant evidence of syphilitic disease. She remained free from rash until, after a few months, she became pregnant the second time; then at about the corresponding period the symptoms of secondary syphilis recurred, and again subsided under appropriate treatment. The second child was born at term and appeared fairly healthy, but

within a week or two developed severe constitutional syphilis and died therefrom when it was six weeks or two months old. The mother died a few weeks afterwards from phthisis, of which she had first shown symptoms during the latter part of her first pregnancy. She had never previously manifested any phthisical tendency and all her immediate relatives were and have remained free. I think there can be no doubt that disease localised in the enlarged testicle was the source of contagion. The second case also concerns an old friend of mine. A married man, who has never had any family, inoculated himself accidentally with syphilis. Within less than a year the disease affected his brain and he became hemiplegic. He recovered, however, in the course of a few months and has remained free from specific symptoms ever since, and is in a sense fairly well. About seven years afterwards his wife, who had never shown any signs of such disease previously, consulted me for a characteristic attack of syphilitic roseola and sore-throat. From this she recovered quickly under the influence of iodide of potassium and mercury and she remains well. I may add that the gentleman's disease was not of the genital organs, and that not a shadow of suspicion rests on the wife's character.

In endeavouring to arrange the material which I wish to bring before you in such a manner as to render it interesting I confess that I have experienced some difficulty; partly because, while syphilitic lesions of the nervous centres fall into several well-marked categories, the symptoms resulting from them are by no means always or even generally so far distinctive as to allow of non-fatal cases being arranged in corresponding groups, and partly also because we cannot always be sure, even when aided by post-mortem investigation, that the cases which we are disposed to regard as syphilitic are really syphilitic or conversely. I propose not to meet these difficulties and overcome them, but to evade them; and this I shall do somewhat roughly—first, by dealing for the most part with fatal cases and considering them as far as possible under the heads of syphilitic disease of vessels, gummata and inflammatory infiltration of tissues; secondly, by discussing instructive or interesting cases which did not prove fatal or in which the diagnosis was not verified by post-mortem examination, and by interpolating or adding such remarks or comments as the cases themselves suggest.

Syphilitic arterial disease has been for many years past a well-recognised affection. None of the arteries are, so far as I know, exempt from liability, although, according to our present knowledge, some suffer in larger proportion than others. Both the aorta and the pulmonary artery may suffer, as also may any of the systemic branches sufficiently large to have received distinctive names; and there is abundant reason for believing that the smaller and even microscopic arteries are at least as vulnerable as their larger relatives. The syphilitic process may involve the entire thickness of the vascular walls, but it commences in the inner or outer coat and always mainly implicates one or other or both of these. I suspect that its not infrequent commencement in the inner coat is due to direct inoculation by virus circulating in the blood, and am inclined to agree with Mr. Hutchinson that when the outer coat suffers primarily it is from the fact that the vessel has become involved in lesions originating in the vicinity. Syphilitic disease causes thickening and irregularity of vessels, with tendency on the one hand to aneurysmal dilatation and rupture and on the other to stenosis and more or less complete obstruction by thrombosis. The consequences which would naturally follow such conditions are derangement of circulation and impairment of nutrition in the parts to which the diseased vessels are distributed, with on the one hand softening or some equivalent change, and on the other hand hæmorrhage, either from the rupture of a diseased vessel or in connexion with diffused degeneration of tissue. It is curious that although these syphilitic lesions are occasionally widely distributed they usually occur in limited districts, the vessels elsewhere remaining wholly or for the most part healthy. Before proceeding to quote characteristic cases of the association of cerebral symptoms with syphilitic lesions of cerebral arteries, I will venture to bring before you three cases in which no doubt there were either central nervous lesions or symptoms referable to the nervous centres, but in which these were of secondary if not trivial importance. Their main interest indeed depends on the fact that they furnish admirable illustrations of the characters and consequences of advanced syphilitic arterial disease.

The first of these was brought before the Pathological Society by Dr. Walter Edmunds on May 3rd, 1892.[1] The patient was a man aged thirty-six, who came under Sir William Mac Cormac's care on account of an aneurysm on the right side of the neck, which had been rapidly increasing in size. He had a few days before admission been seized with a sudden attack of faintness, and after admission the mere handling of the tumour frequently brought on similar attacks. Owing to this circumstance, to the belief that his arteries were extensively diseased (for no trace of pulsation could be felt in any of the arteries of either upper extremity, and there was a loud basic systolic murmur), and to the fact also that the patient was exceedingly ill, it was decided not to attempt any operative procedure. I was consulted in the case and concurred in this decision. The patient had had well-marked syphilis twelve years previously. He died comatose twelve days after admission. The heart was large and the pericardium adherent by easily broken-down adhesions. The valves were healthy. A gumma about two inches in diameter projected from the groove between the right auricular appendage and the pulmonary artery. The whole of the thoracic aorta, including the arch, was enormously thickened, all the coats being involved, but the outer coat much more so than either of the others. In places they were collectively more than eight times as thick as natural. The thickening extended along the innominate and right subclavian, the latter of which would only admit of the passage of a bullet probe. The right common carotid was healthy, but the right internal had springing from it near its origin a globular aneurysm about two inches and a half in diameter. The left common carotid was diseased and only admitted a bullet probe, and the left subclavian about an inch from the aorta ended in an impervious fibrous cord. The cerebral and abdominal arteries were all healthy, and no other visceral syphilitic lesion was discovered.

The second case was exhibited before the same Society and on the same evening by Dr. Herbert Hawkins. It was that of a girl aged eleven who was admitted into St. Thomas's Hospital suffering, it was supposed, from acute nephritis. After experiencing one or two short attacks of illness, probably due to infarction of the lungs, she was observed on Feb. 7th to have swollen and cold legs and a few days later swelling of the face. She was admitted on the 20th, being at this time extremely ill. She had general dropsy, was passing very little urine, which contained a small quantity of albumen but no casts, and there was evidence of pulmonary congestion. Subsequently she passed a little blood on one occasion with her urine, which continued to be for a time very scanty, but during the last four days of her life it became fairly abundant and ceased to be albuminous; the lower part of her lungs became solid; her pulse of high tension, she presented the Cheyne-Stokes breathing and died (apparently from uræmic poisoning) on March 2nd. At the post-mortem examination gross disease was found in nearly all the arteries of the body. The first part of the aorta was studded with grey translucent spots and patches, from the size of a split pea to that of half a crown; and for a length of three inches, immediately above the bifurcation, the thickening was so great that the channel barely admitted a bullet probe. Similar patches were observed in the common carotids and subclavians, in the left internal carotid as it entered the cranial cavity and in the right internal carotid involving the origin of the middle cerebral. There was similar disease throughout the pulmonary arterial system. The renal arteries towards their entrance into the kidneys were completely obstructed by clots, which were old and white at the periphery, but red and comparatively recent centrally. There was an old infarct in the kidney, but neither organ showed any evidence of nephritis. The liver presented a patch of peritonitic thickening and was rather large. The spleen was large and firm and its capsule thick and covered by old adhesions. The lower and back parts of both lungs were consolidated and contained large infarcts. There was hæmorrhage into each lateral lobe of the cerebellum, the clot in each case being the size of a hazel nut. No history of syphilis was elicited and the teeth were quite normal. There can be no doubt, however, that the lesions in this case were the result of congenital syphilis.

The next case is one which I exhibited before the Pathological Society on the 1st of April, 1856, as an example of aneurysmal dilatation of the coronary arteries of the heart. The patient was a sailor aged twenty-two who was admitted to hospital for what was supposed to be fever, to which paraplegia

[1] THE LANCET, May 7th, 1892.

succeeded, and who died at the end of three months apparently from exhaustion. The case was not under my care, and I can give no further clinical details concerning it. The pericardium was healthy. The heart was somewhat enlarged; and in the course of the arteries ramifying over its surface were observed a number of nodules, isolated and in strings, and individually from the size of a pea downwards, the nature of which at first sight was not very apparent. Dissection, however, showed that they were aneurysmal dilatations of the trunks and branches of the coronary arteries. In some situations the vessels presented an irregular sacculated condition, involving them from half an inch to two inches of their length, and in some instances continuous series of vessels were affected. The parietes of the dilated parts were thick, firm, and apparently consisting of dense fibroid tissue. Some were empty, others were filled with adherent, tough, buff-coloured clots. The muscular walls of the heart and its valves were healthy, as also was the arterial system generally. There were several rather large patches of pulmonary apoplexy in the right lung. The liver and spleen were congested. The kidneys were of normal size, but the cortical substance of each was thickly studded with buff-coloured patches and dark red-coloured tracts which seemed to have resulted from hæmorrhage occurring at different times. I described the brain and spinal cord as healthy.

I am not aware that at this time (thirty-six years ago) any suspicion was entertained that the arterial system was apt to suffer in the course of constitutional syphilis; neither was it then the custom to examine the texture of the nervous centres so critically as has been done of recent years. Considering, however, that the patient died paraplegic, I have now little doubt that morbid changes might have been discovered in the cord had it been treated and examined by modern methods. No history of syphilis is recorded in this case; but there is also no reason to believe that any suspicion of syphilis was entertained while the patient was under treatment or that he was ever questioned on the subject. But I have for many years now regarded the specimen which I bring before you as a typical example of syphilitic disease of the coronary arteries and the case as one in which paraplegia was due to similar disease of the smaller arteries distributed to the cord.

In the following year, Nov. 3rd, 1857, Dr. Peacock and I showed a case at the Pathological Society which seemed to me to be of singular interest. It was that of a pitman aged thirty-five who had been admitted under Mr. Le Gros Clark's care for hydrocele. This was tapped, and the testicle was then found to be much enlarged. Three or four days after admission he began to lose the use of his right arm and subsequently his speech became affected. It was then ascertained that six months before admission he had had a fit, followed by paralysis and failure of sight, from the effects of which he had in great measure recovered. The patient was now transferred to one of Dr. Peacock's beds. At this time he appeared to be intelligent, but his speech was imperfect, his mouth was drawn to the left and he had almost completely lost the use of his right arm, but he could move his legs freely. There was no anæsthesia. The pupils were widely dilated, more especially that of the left eye, and scarcely responded to light. He could swallow solids, but not fluids. He improved a little for a few days. But twenty days after admission into the medical ward he had a fit and became comatose, in which condition he died two days later. The calvaria and dura mater were healthy, the subarachnoid fluid scanty. The large veins ramifying over the surface of the brain were distended with blood, but there was little capillary congestion. The substance of the brain was everywhere of normal consistence and colour. The ventricles contained but little fluid. The basilar artery in nearly its whole length was white, opaque and solid; its canal was occupied by a cylindrical body, the anterior extremity of which was rounded, while the posterior was bifid and formed a nipple-like projection into each vertebral artery. The body was hollow and contained a little colourless fluid, but its parietes were tough and greyish and adherent to the arterial walls. The adhesions, however, were neither dense nor universal; and it seemed possible that there was space for a little blood to pass between them. The cerebral portions of the internal carotids had not more than half their normal diameter; and both they and their branches for a length of half an inch were blocked up by solid adherent coagula of old formation. All the other arteries at the base were healthy and contained either fluid blood or soft coagulum. The heart was large, but its valves were healthy. There was a small hydrocele on the right side and the corresponding testicle was in a state of chronic inflammation. All the other viscera were healthy.

This case is remarkable from the fact that at the necropsy all the main arteries at the base of the brain appeared to be completely obstructed by old coagula; and the puzzle as to how the cerebral circulation and the normal consistence of the brain had been maintained seemed insoluble. I can only suppose that the brain had been imperfectly supplied through the agency of the partially obstructed basilar and the circle of Willis and that his final seizure was connected with some increase of obstruction taking place here at the time of his last fit. It seems odd to me now that I seem to have had no suspicion that the arterial disease was syphilitic, either when the case was exhibited or a year later, when I read before the same Society a paper entitled "An Analysis of Seven Cases of Obstruction of the Cerebral Arteries," in which I not only included this case but quoted two others with a definite history of syphilis and ventured to suggest of them that the arterial disease was syphilitic. It is true that no history of syphilis was obtained and obviously no suspicion of it was excited by the condition of the testis. I have no doubt now that the affections of the testis and of the arteries were both syphilitic.

One of my two supposed syphilitic cases just alluded to is narrated at some length in the tenth volume of the Transactions of the Pathological Society, p. 21. The patient was a steam-packet engineer who was admitted to hospital on Jan. 4th, 1859. He had had three fits, the first some years previously, the second eighteen months before admission and the last eleven days. He had continued to follow his employment (although after the second fit he had become liable to headache and vertigo) until the occurrence of the third, which was followed by partial left hemiplegia and indistinctness of speech. On admission he was still suffering from hemiplegia and thickness of utterance and appeared imbecile. While under treatment the imbecility increased and he became troublesome and spiteful, and on one occasion threw his fæces at the Sister. On Feb. 25th he passed into a comatose condition and remained thus for twenty-seven hours, when he died. No history of syphilis was noted. At the post-mortem examination, however, the scars of ulcerated buboes in the groins were observed. On removing the calvaria the dura mater over the greater part of the upper and lateral aspect of the left anterior cerebral lobe was found to be thickened, rough, and a little congested, the corresponding surface of bone being rough and softened. The surface of the brain generally was healthy though a little congested, but the dura mater in the region before indicated and in an area of about eight square inches, was firmly adherent to it by means of a layer of fibroid tissue in which and partly in the subjacent brain were embedded two or three tough opaque white fibrous masses from the size of a hazel-nut downwards; the grey matter corresponding to the adhesions was softer than natural and in places had wholly disappeared; in the anterior part of the left corpus striatum was an imperfect cyst, apparently of hæmorrhagic origin and about as large a hazel nut; the anterior half of the right corpus striatum was congested and much softened; the rest of the brain was fairly healthy; the left internal carotid and its branches for about an inch were buff-coloured and looked atheromatous, and on slitting them up they were found to be filled with adherent cylinders of tough old coagulum; the other vessels were healthy; the heart and lungs were normal; the liver was attached to the diaphragm by numerous old adhesions which corresponded for the most part to deep fissures in the surface of the organ, and these in their turn corresponded to cicatrix-like tracts in the substance of the liver, embedded in some of which were small knotty tumours; all the other organs were healthy.

I remarked of the case that "it was exhibited chiefly in reference to syphilitic disease of internal organs which had been several times brought under the notice of the Society by Dr. Wilks and other observers. The kind of deposit supposed to result from the syphilitic poison was recognised both in the liver and in the brain." Later, in the same volume, when I again referred to this case amongst my group of seven, I spoke of it and one other case, which I shall not now quote, in the following words: "In two of the cases the patients had suffered from well-marked syphilis. Is it possible that the secondary cachexia of this disease is capable of producing the condition of cerebral arteries under consideration?" I may add that even at this time what are now known as gummata of internal organs were by no means

generally regarded as syphilitic, and that, so far as I know, syphilitic disease of arteries was not recognised. Indeed, I may point out, as showing how little this latter lesion was suspected of having any association with syphilis, that even our President, in his excellent article on constitutional syphilis, which appeared seven years later in "Reynolds' System of Medicine," makes no allusions whatever to the subject.

In the sixteenth volume of the Transactions I published another case. J. C——, a carpenter aged twenty-seven, came under my care on May. 2nd, 1863. He had contracted syphilis four years previously and had had secondary eruptions at intervals since. He had been attacked four days before admission with pain in the head and giddiness without loss of consciousness, and at the same time lost power in the right arm and in the legs. On admission he was quite sensible, but his speech was imperfect. He complained of giddiness and of aching in the shoulders. His right arm was powerless and his mouth was drawn to the left. His legs appeared fairly normal. There was no anæsthesia or affection of the special senses and his pupils acted to light. He became drowsy some days after admission, but there was no material change in his condition until the morning of the 16th, when, after complaining of pain in his head, he suddenly became insensible. He never recovered complete consciousness, but would now and then respond by opening his left eye when shaken or spoken to loudly. The pupils were equal and acted to light. The left arm lay limp and entirely without motion, but all the other limbs, including the previously paralysed right arm, presented occasional slight convulsive movements. During the last few days of life he was completely comatose, his convulsive movements ceased and his eyes became divergent. He died on May 28th. The skull and dura mater were healthy. The arachnoid was somewhat opaque and there was a little turbid fluid in its cavity. The pia mater was slightly congested. The arteries at the base were healthy with the exception of the right middle cerebral, which was completely obstructed by a firm decolourised clot. The middle lobe of the right cerebral hemisphere was softened and the grey matter in parts congested, in parts paler than usual and yellowish. The left corpus striatum presented a cavity about one-third of an inch in diameter, containing turbid fluid and bounded by vascular walls. The heart was healthy, the lungs pneumonic in the lower lobes. The capsules of the liver and spleen were thickened in patches, but otherwise these organs were normal. The kidneys were small, and presented a few irregular depressions on the surface. I remarked of the case that it was interesting as furnishing an example of obstruction by clot of one of the middle cerebral arteries without any discoverable source of embolism, and from the fact that the patient had, to within a short time of his last illness, suffered from syphilis, which I had already shown to be a not improbable cause of such obstruction. I remarked, further, that the obstruction of the right middle cerebral must have been the cause of the sudden aggravation of symptoms, with paralysis of the left arm, which took place twelve days before death; and that his original attack of right hemiplegia must be associated with the presence of the cyst discovered in the left corpus striatum. It seemed to me doubtful whether this had resulted from hæmorrhage or softening, but I thought it probable that in either case it had been determined by disease of some of the minute terminal branches of the left middle cerebral distributed to the affected region.

Since the case just narrated was published, now nearly thirty years ago, I have naturally seen many other cases of syphilitic disease of the cerebral arteries, in some of which the arteries were alone implicated, in more of which the arterial disease was complicated with gummata, and amongst them two cases under my care, which were published as Cases 1 and 2 by Dr. Greenfield in his communication to the discussion on visceral syphilis were recorded in the Transactions of the Pathological Society for 1877. But there is naturally a certain amount of sameness in cases of cerebral arterial disease, and I shall content myself therefore with devoting the remainder of this lecture to the consideration of a case or two in which the disease was limited to the basilar or its branches, and in which the pons or neighbouring parts had undergone softening. I published a paper on this subject in THE LANCET of July 7th, 1883. The cases quoted therein were six in number, of which only two were certainly syphilitic; but I strongly suspected, though I had no proof, that two or three of the others were of the same nature.

The first undoubtedly syphilitic case was that of a young man aged thirty-three who had contracted a chancre exactly six months before his death, and who was suffering from secondary symptoms in the form of psoriasis when his fatal illness seized him. Excepting for his secondary symptoms he had enjoyed good general health until within three or four weeks of his admission. He was then attacked with occipital headache which was followed in the course of two days by frequent vomiting. He was admitted on April 16th, 1872, at which time he was still suffering from headache and presented abundant traces of his syphilitic rash. Two days after admission he began to ramble a little and to be troublesome; and the next morning it was noticed that his pupils were contracted, his conjunctivæ congested, and his left eyelid dropped slightly. Five days later, when he awoke in the morning, he was found to be hemiplegic on the left side; and after another four days it was noticed not only that the left lid still dropped a little, but also that there was paralysis of all the muscles of the right eye, excepting the superior oblique. Meanwhile the patient was becoming more and more drowsy and stupid; and he died the fourth day after the paralysis of the muscles of the right eye had declared itself—namely, on May 2nd. Notwithstanding the fact that the first evidence of brain disease had shown itself in less than five months after he had contracted syphilis, it was naturally assumed that the patient was suffering from cerebral syphilis, and he was treated accordingly. Further, it was not difficult to speculate from the symptoms as to whereabouts the cerebral lesion would be found. The left-sided hemiplegia pointed to involvement of the motor tract issuing from the right hemisphere of the brain; and that the part directly implicated was the right crus cerebri, or the contiguous portion of the pons, had been foreshadowed by the slight ptosis observed in the left upper eyelid. This surmise was confirmed when a few days later total paralysis of the right third nerve was added to the other phenomena. At the post-mortem examination there was found syphilitic thickening, with obstruction by clot, of the right posterior cerebral artery, and consequent softening, with more or less disintegration in patches of the right crus cerebri and of some of the neighbouring parts to which this artery is distributed. The paralysis of the right sixth was no doubt due to thickening of the membranes observed at the base of the brain; and the very partial paralysis of the left third was connected with some thickening of its trunk. It may be assumed that the patient's early and comparatively vague cerebral symptoms were caused by the disease of the arterial walls and slight associated inflammation of the membranes in the neighbourhood, that the hemiplegia took place when the channel of the posterior cerebral became suddenly occluded and that the right third nerve got involved as the area of softening extended. Beyond considerable excess of fluid in the ventricles there was no further sign of disease in the heart; the abdominal and thoracic organs were all healthy.

The second case was that of a young man aged twenty-seven, who had had primary syphilis about two years before the symptoms of cerebral disease arose. He was admitted under my care on Dec. 24th, 1881. For three weeks he had complained of pain in the frontal region, which had become more severe during the last two days. There had been no sickness. During the night of the 23rd he was seized with almost complete hemiplegia on the left side, associated with rigidity of the arm and leg, inability to speak, and well-marked paralysis of the third nerve on the same side. On admission he was still partially unconscious; the pupils were dilated and equal; there was an external strabismus of the left eye and ptosis of the left eyelid; the mouth was drawn slightly to the right, the tongue was protruded markedly to the left; he was unable to speak, but seemed to understand what was said to him and indicated that he suffered from pain in the frontal region; no difficulty of swallowing; the left arm was flexed at the elbow and lay across the chest and the hand was closed; the whole limb was rigid and completely paralysed; the left leg also was rigid but extended, and he retained slight power over the movement of the toes; the patellar reflex was brisk on both sides, but more so on the left; no ankle clonus; plantar reflex almost absent on the left side; left leg colder than the right; no anæsthesia. The next day he had attacks of partial unconsciousness, during which the head and eyes were strongly turned to the left. On the following day he manifested some return of the power of articulation, and was evidently not aphasic. All signs of paralysis of the left third, portio dura and hypoglossal had disappeared and the paralysed arm and

leg had become limp. Three days later the urine, which from the beginning had had to be drawn off, had become alkaline and offensive, and on that day his temperature reached 103·4°. After this the pulse increased in frequency, the temperature rose irregularly, and on one occasion he had a prolonged rigor; there was a slight return of the paralysis of the left third, facial and hypoglossal; and the left arm and leg again became rigid. He then passed into a state of coma, and at the time of death (namely, noon Jan. 4th, 1892) his temperature had risen to 109·2°. The vessels of the pia mater were injected, but no trace of meningitis was discoverable. The posterior cerebral and some of the smaller arteries in the neighbourhood were much thickened, yellowish and opaque, apparently the seat of syphilitic disease; but the other and larger vessels were healthy. There was slight comparative softening of the left temporo-sphenoidal lobe, and the pons, which was somewhat smooth, was soft and semi-fluctuating. On incising this part an irregular patch of broken-down brain substance was found to occupy the greater part of its right half, being separated from the surface and from the surrounding healthy substance by a zone of congested and apparently inflamed tissue. The rest of the brain substance was normal. No other important signs of disease were found. The post-mortem examination does not clearly explain the concurrence of left hemiplegia and slight paralysis of the left third; but, on the other hand, the softening of the right half of the pons accounts both for the left hemiplegia and the deviation of the eyes and head to the left. It is interesting in this case that while some of the larger arteries at the base were diseased they were not obstructed and that while the pons was the chief seat of softening the basilar artery was healthy. I suspect that in this case, as in some of the other cases I have quoted, where there was manifest syphilitic disease of arteries at the base associated sometimes with obstruction, and where patches of softening were found in regions with which these diseased arteries had no connexion, the softening was due to obstructive disease of the smaller vessels ramifying in the softened district.

OPHTHALMIC KNOWLEDGE CONSIDERED AS ESSENTIAL TO GENERAL MEDICAL AND SURGICAL WORK.[1]

BY R. LAWFORD KNAGGS, M.C. CANTAB.,
OPHTHALMIC SURGEON TO THE LEEDS PUBLIC DISPENSARY.

THE subject of ophthalmic knowledge in relation to medical and surgical work is not new, but the time is suitable and the subject itself is ripe for further consideration and review. By certain new regulations the Conjoint Board of the Royal Colleges of Physicians and Surgeons has decided that all students commencing professional study after January 1st, 1892, must have received three months' clinical instruction in ophthalmic surgery at suitable institutions before being admitted to the final examination. We may expect therefore that this new lead will be followed in other directions, and that before long the ophthalmoscope is likely to occupy a very much more prominent place in the ordinary practice of our profession than it has done hitherto. I shall not be considered censorious or inaccurate when I state my belief that the bulk of the profession engaged in general practice derives little information or assistance from the use of this instrument. Want of skill, want of time, imperfect knowledge of what can be learnt and possibly inadequate remuneration for the time consumed in the investigations all contribute in divers ways to keep the ophthalmoscope in general practice very far below its capabilities. The investigation of ocular conditions has thus been handed over to a small number of men, and it has come to be regarded as not inconsistent with a reputation for sound general professional knowledge that the individual should candidly confess absolute ignorance of all pathological conditions of one of the most important, if not one of the most vital, organs of the body—an organ, too, in which changes associated with many common and important general diseases can be seen and watched *in situ* during life; whilst in the case of the larger viscera, which we handle or palpate, percuss or auscultate, under the impression that we know all about them, the various alterations are much more largely matters of inference. No instrument probably since the introduction of the stethoscope has done so much to add to our general knowledge of disease, and none is more highly valued by those who have mastered its difficulties. My purpose now is to refer to a number of facts, nearly all of which can be illustrated by cases occurring in my own practice, to prove that the general practitioner should not consider a knowledge of ophthalmic medicine and surgery as outside his proper sphere, but rather that it should be the necessary complement of his professional knowledge. Many patients seek advice for general ailments, the only cure for which is the suitable correction of their refraction. Children in this way are often chronic invalids, till an observant schoolmaster, perhaps, detects their deficient sight, suitable glasses are provided and their recurring headaches and rhubarb and soda become from that time things of the past. The following instance will show how an important and, possibly, a serious mistake may result from so simple a matter. A child was admitted into hospital with some febrile disturbance and vomiting, complaining of its head and with an internal strabismus which had just appeared. When the physician went his rounds the probable existence of tuberculous meningitis was gravely discussed. As the child improved and the strabismus persisted the delusive quiescent period of that disease was not lost sight of. The child, however, remained so well that in a happy moment the ophthalmic surgeon was consulted as to the strabismus. It was due to hypermetropia. Such a case points the moral that every medical man ought to be able to distinguish between a paralytic strabismus and one due to hypermetropia; and that when a strabismus becomes a possible factor in a diagnosis its real nature should be decided. Mistakes in diagnosis are easily made and lead to errors in treatment in such cases; but it may be reasonably hoped that their numbers will diminish, for abnormalities of refraction are capable of immediate detection by ophthalmoscopic methods, which need the very minimum of skill and are quite within the power of anyone to acquire. The purulent ophthalmia of infants and the gonorrhœal ophthalmia of adults are not liable to be overlooked. These serious diseases at once create anxiety and the medical attendant cannot release himself from his responsibilities, as he may prefer to do in less urgent matters.

In cases of phlyctenular ophthalmia and corneal ulceration, which he will frequently be called upon to treat if his practice is large, his responsibilities are not unimportant. The damage to vision from the irregular astigmatism produced by the corneal scars may seriously influence the choice of an occupation and the future prospects of the patient. As these ailments so frequently recur in the same individual and amongst the poorer classes, the practitioner is forced to deal with them, and it is important that he should know how to treat them well. He should not lose sight of the scrofulous diathesis with which they are so frequently associated, and should avoid measures for the local condition that would have a deteriorating influence upon the constitutional state. One point he should never lose sight of—viz., that if constitutional delicacy is a predisposing cause of the ailment refractive errors are often exciting ones. Another of the more common forms of eye disease with which medical men are familiar is interstitial keratitis. The evidence it may leave behind it, like the results of a symmetrical disseminated choroiditis, may furnish the clue to the existence of the syphilitic taint and in obscure conditions may have a diagnostic value. The discomfort arising from some of the ocular manifestations of syphilis may lead occasionally to the detection of the disease for the first time. Two persons presented themselves amongst my out-patients last week suffering from iritis. One was a woman who made no mention of a well-marked secondary eruption with which her body was covered. When it was pointed out she attributed it to "change of life," and stated that she had had no advice or treatment for it. The other, a young man, had contracted a venereal complaint not long before, and when he came with iritis was extensively affected with a severe syphilitic rash. He was undergoing no treatment and would have gone away without referring to it if its existence had not been sought for. These are cases whose real nature may easily escape detection. All who have studied syphilis as a whole should be familiar with its commonest manifestations in all the important organs of the body and know how to treat it both locally and constitutionally. But it is not only in syphilis

[1] The Presidential Address to the Huddersfield Medical Society, delivered Nov. 1st, 1892.

that iritis may occur; it may be produced by a deposit of tubercles, which may be seen studding the iris. The prognosis is not very favourable. These cases left to themselves are more likely to end fatally from tuberculous inflammation of the meninges or other organs than to recover; so that if good is to be done the treatment must be decided and prompt. Fortunately this form of iritis is not common, but it is important that its gravity should be speedily recognised and that it should not be left till it is too late to interfere with any prospect of success. Many years ago Mr. Hutchinson drew attention to the intimate connexion existing between certain cases of frequently recurring iritis and the rheumatic or gouty diathesis, and published a long series of cases in the Royal Ophthalmic Hospital Reports. This disease, which is one of the most troublesome and intractable forms of ocular inflammation, often seriously cripples those who suffer from it and may lead to more or less complete blindness. Where hospitals are distant and specialists unknown it is essential that the practitioner should distinguish and adequately estimate such conditions, so that he may carry out independently and intelligently a line of practice together with suggestions or hints that may come from those of greater ophthalmic experience.

With the introduction of the ophthalmoscope many pathological conditions were revealed within the eyes which experience has proved to be connected with, and often the result of, various constitutional diseases. The delicate and highly organised nervous and vascular layers of the fundus are, probably more than any other similar substance in the body, liable to be affected by diseases which seriously influence the nervous and vascular systems; and sight is so sensitive and of such value to the individual that any impairment of it is quickly detected by the sufferer and viewed with alarm. Thus it happens in many general diseases that the patient first becomes aware that something is amiss by the onset of defective vision. It is a pity that visual deficiencies do not attract more definite professional attention, for the custom is widely prevalent to go first to the optician for glasses rather than to the medical man for advice. If the optician has a fair knowledge of his business and is a conscientious man he frequently recognises at once his inability to help; but it is no uncommon thing to find much money spent on glasses, time wasted, and vision still further impaired before professional assistance is sought. For the intelligent use of the ophthalmoscope in general practice a certain amount of elementary knowledge is required. Without this appearances would often be misread or give rise to ideas that are vague or altogether mistaken; but when once this knowledge is acquired careful observation of the many intra-ocular conditions that are to be met with in abundance in practice cannot fail to be highly instructive, to enlarge our grasp of disease and of pathological processes and to prove eminently useful towards forming a sound opinion. Not the least important part of this elementary knowledge is anatomical—viz., the ability to decide in what structure within the eye the visible lesions are really situated. Many men are able to use the ophthalmoscope without difficulty, but are unable to give adequate reasons (anatomical ones, I mean) for ascribing certain conditions to the retina and others to the choroid. Consequently when they meet with appearances differing from those they have learnt to know by sight and labelled with a name they find themselves at a loss and unable to form clear and decided ideas about them. On the other hand, those who possess this knowledge and who are able to locate in the one or other structure or part of structure what they see have a sound foundation upon which they can build if they use their opportunities. The inflammatory and degenerative states and hæmorrhages which are to be met with in the retina they will trace in most cases to some constitutional disease or diathesis. In the majority of instances some form of Bright's disease will be the cause. In some the existence of retinitis will be of value as an evidence of advanced disease; whist in others renal disease may not be suspected until the ophthalmoscope reveals an inflamed retina as the cause of failing vision. Not long ago I saw a woman in whom well-marked retinal changes led me to detect diabetes, until then unsuspected; and I remember another instance in which a medical friend and myself were greatly assisted in our prognosis by finding retinal hæmorrhages associated with diabetes and albuminuria. Sometimes pathological changes are seen in the retina in syphilis, in leucocythæmia, in anæmia, pernicious or simple, and in gout. Embolism of the central artery too, causing sudden blindness in the affected eye and typical ophthalmoscopic changes, may, like embolism of a cerebral artery, be one of the disastrous results of cardiac disease. Choroidal mischief has much less significance as an indication of constitutional disease than retinitis, yet it sometimes affords information that may prove of the greatest assistance. I am permitted to refer to a case that some years ago was sent into the Fever Hospital supposed to be suffering from typhoid fever. As time passed the diagnosis remained uncertain. Curiosity prompted me to ask to examine the eyes, and I saw what appeared to be choroidal tubercle. The necropsy proved the accuracy of this supposition and the final diagnosis of tuberculous meningitis was correct. I know of another instance in which the timely recognition of tubercle in the choroid of a patient who did not seem seriously ill enabled a diagnosis to be made of acute general tuberculosis and a professional reputation to be saved from damage. Nor must I omit to mention the frequency with which various forms of choroidal disease are to be found in the subjects of acquired or congenital syphilis. In a large number of instances affections of the optic nerve are closely associated with some disease which lies well within the province of medicine or surgery. Optic neuritis is sometimes to be seen in albuminuria and it may be one of the more serious signs of lead poisoning. In my case-books I have a note of a man with double optic neuritis from syphilis of such intensity as to cause complete blindness, but which, under vigorous mercurial treatment, recovered completely with normal acuteness of vision, and one of my dispensary patients still under treatment who came for failing vision due to papillitis in his only good eye had an unsuspected chancre and a secondary rash.

Optic neuritis is developed in various intra-cranial diseases, but in cerebral tumour it is one of the chief diagnostic signs. We may all think ourselves competent to diagnose so gross a lesion as a cerebral tumour, but if we cannot use the ophthalmoscope we cannot do it without assistance. The surgeon of the future who may aspire to interfere with such growths will rightly deserve to be called "mechanical" rather than "scientific" if he is unable to arrive at his diagnosis without the coöperation of the specialist. Though primary atrophy of the optic nerve, as distinguished from post-neuritic atrophy, is also met with in plumbism, its chief interest lies in its connexion with sclerosis of the spinal cord. When a student I used to wonder that I never saw atrophied discs in the well-marked cases of locomotor ataxy which were common enough in the wards and amongst medical out-patients. But now I know that what I missed there is to be found in ophthalmic clinics. Here cases of primary atrophy are of sufficiently frequent occurrence in which a suspicion, a probability, or an absolute certainty exists as to their association sooner or later with disease of the spinal cord. The length of time that such conditions take to develop serves to deprive many of these cases of a good deal of their interest in hospital practice. But in private practice it is otherwise. If the progress of the disease is slow the interest of the medical man is kept alive as in the course of years he sees certainty issuing out of obscurity. Many years ago my sympathy was aroused on behalf of a comparatively young man who had been stricken with blindness. In due course I came in contact with him professionally and witnessed attacks which the term "gastric crisis" aptly designates. Their cause seemed unfathomable. The blindness was due to optic atrophy, and though the knee-jerks were still present I felt that these two interesting conditions had somewhere a connecting link; the patient's subsequent history may be full of interest for me, for I expect if he lives he will develop other symptoms which will leave the nature of his complaint no longer in doubt. Nor is atrophy the only ophthalmic symptom of interest in spinal cord diseases. Another case illustrates the transient paralysis of the ocular muscles which may be seen occasionally in the early stages. A female aged thirty-five, recently under the care of a medical colleague for vague pains in the head and limbs after influenza, presented herself amongst my out-patients with paresis of the right third nerve, which gradually increased and then improved, disappearing completely when after a couple of months a paresis of the left third nerve occurred. The duration of the second affection was only short. This patient had no knee-jerks, and when I referred her to my colleague he was able to elicit a description of true lightning pains. We may meet also with paralysis of the muscle of accommodation as a sequel of diphtheria. Such a case came to me not long ago and with it there was paresis of the soft palate muscles, which caused a nasal voice and permitted food to pass into the nose; yet, strange to say, it was the child's inability to read

that attracted its parents' attention. But the intricacies of the paralyses of the ocular muscles and of such conditions as hemianopsia are so valuable as localising symptoms in cerebral disease and so complicated and difficult to remember that it is no small satisfaction to know that we can find very valuable information about them in Mr. Swanzy's Bowman lecture in vol. ix. of the Ophthalmological Society's Transactions. Ophthalmic complications of considerable interest are sometimes produced by the most common diseases. There is ulceration of the cornea that is occasionally seen with herpes zoster of the first division of the fifth nerve; and I may here notice a similar condition that may result when the same nerve is implicated in disease. Amongst my records I find a note of one case in which an atrophied disc and complete blindness were attributable to an attack of facial erysipelas, doubtless with orbital cellulitis; and only recently I had to remove an eye which was found completely disorganised when an erysipelatous swelling subsided and allowed the lids to be opened.

For the investigation of ocular conditions connected with pregnancy the general practitioner has greater facilities than anyone else. When they occur in connexion with eclampsia and albuminuria the great and pressing danger to life tends to throw the sight affection into the background. But there are states in which the damage to vision may alone require consideration. Thus lately I have followed the progress of a case, which I hope soon to record in detail, in which there was every reason to believe that pregnancy was leading slowly and insidiously to optic nerve atrophy and complete blindness. By the kindness of Dr. Braithwaite the patient was admitted into the Leeds Infirmary for the induction of premature labour. Vision that had fallen to such an extent that the fingers could not be seen began to improve directly the immediate effects of the labour had been recovered from and is now about one-third of the normal standard. This result was the more gratifying to the patient and myself inasmuch as the other eye had been completely blind for years from atrophy which had come on in connexion with a previous pregnancy. Severe injuries often implicate the eyes, and important internal changes will take place within an eye as the indirect result of an injury in its neighbourhood. A conspicuous example of this not long ago left the Huddersfield Infirmary, where she was under the care of my father. A young woman was shot in the right temple, the bullet passing below the orbit, across the nasal fossa and lodging probably in the antrum of the opposite side. The bullet wound healed without the least trouble in a few days, but a remarkable series of changes took place within the eye as the result of the concussion. Inflammation of the ruptured choroid supervened in the yellow spot region, and, in spite of vigorous treatment, it ended in a central detachment of the retina and a serious and permanent defect in the very centre of the field of vision. It was instructive to watch the downward progress of events within the eye until the climax was reached, and the observer could not fail to be impressed by the great difference in the reparative powers possessed by the various anatomical structures.

Cases to illustrate my subject could be multiplied indefinitely. Note-books of ophthalmic work are full of instances in which ocular conditions have had to be traced back to states of health which lie strictly within the domain of the general practitioner, and the treatment in many instances resolves itself into that which is needed for the general bodily state. The specialist, so-called, simply fills the gap necessitated by an incomplete professional curriculum; but the process, though it has its pleasures, is not without its inconveniences. It is hardly comfortable for any party concerned when a patient who has casually drawn the attention of his medical attendant to a cataract and been referred to a specialist because eye diseases are out of his province has to be returned to the care of his own medical man because he is found to be suffering from diabetes. Yet these things do happen and will from time to time repeat themselves, until ophthalmic medicine and surgery become essential parts of medical and surgical work. Practitioners with but little acquaintance with ophthalmic literature will perhaps feel a difficulty in knowing where to turn for information presented in the form that is most useful to them. Text-books cannot be arranged to suit all parties, and the association of ocular conditions with various forms of disease or injury does not receive the attention it deserves in those which most men have at their disposal. Thus in two popular text-books on Diseases of the Eye I can find no reference in the indices to pregnancy, and the notice taken of it in the text is almost as meagre; and yet the ophthalmic conditions connected with pregnancy furnished Mr. Power with material for a long and interesting paper—"Diseases of the Eye occurring in connexion with Pregnancy"[1]—some twelve years ago. The best text-book, after all, is the eye itself. Systematic and regular observation of the things that are written there will furnish much fruit. Books are the outcome simply of clinical observation, experience and thought, and any man who will take the pains to acquire the elementary ophthalmic knowledge necessary for accurate observation can by careful work store up many facts. Sir George Humphry reminds us that facts may be regarded as pegs whereon thoughts may be hung, and thoughts as the rivets whereby the pegs are fastened.

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LOCAL DEPLETION.

BY JOHN BOYD, M.D.EDIN.

IN THE LANCET of July 30th, 1892, there is related the deplorable case of the Commendatore Giordani at Florence, who on the evening of the 14th, whilst walking in Vallombrosa, memorable from the reference by Milton, fell into a pit at the foot of an incline and was there assailed by a myriad of leeches ("litteralmente assalito da una miriade di sanguisughe"). On being rescued and removed to the hotel he died on the third day from the loss of blood in an enfeebled constitution.

In vol. xxix., p. 539, of the *Edinburgh Medical Journal* there is a notice of a communication in Italian sent to me by Professor Sota y Lastra of Seville, entitled "Una Mignatta estrata dalla Laringe quindici giorni depo che vi era penetrata" ("A Leech extracted from the Larynx fifteen days after it had entered therein"). It states that on Aug. 3rd a man aged sixty-four, tall and robust, presented himself at the Polyclinica of Seville complaining of blood freely issuing from his mouth for fifteen days past. At the beginning of that period, being thirsty, he had drunk copiously of cold water from a ditch and immediately after felt constriction in the throat, respiration becoming impeded and voice extinct. After this he was obliged to cough continuously owing to tickling in the larynx. Several hours afterwards blood commenced to issue from the mouth, a little at first, but abundantly later on. He was able to swallow solids and fluids easily. He slept badly, accessions of suffocation awakening him continually. In a few days he became visibly thinner, losing strength and colour. On examination Dr. Sota found the temperature normal; pulse rapid and weak; respiration painfully strident and quickened; thorax dilated fully; vocal vibration normal, as also percussion and auscultation, though the latter was impeded by the laryngeal stridor. Having introduced the laryngoscopical speculum he discovered a leech fastened to a reddish elevation of the epiglottis immediately above the anterior commissure of the cords, extending upwards and backwards, while the caudal extremity was fixed in the right arytenoid. After five attempts, necessitated by the restlessness of the patient, Professor Sota succeeded in extracting the annelide. This was followed by an immediate and complete recovery.

From the same author I have just now received a history of a case ("Sanguiguela adherida al nivel del Cuarto Anillo de la Traquea"—"A Leech attached to the Fourth Ring of the Trachea") originating in a similar subject from the same cause. But here there was neither dysphonia nor dysphagia, and after many efforts Professor Sota observed vermicular movements in a dark mass like coagulated blood at the anterior and middle portion of the trachea. By means of a ball of cotton moistened with a solution of chlorohydrate of cocaine of 10 per 100 applied to the locality and thereby anæsthetised he managed by the laryngeal forceps to extract a small leech 22 millimetres in length and 3 in breadth after difficulties in the achievement that seemed almost insuperable. As an offset to these instances of pernicious local depletion I may refer to one of a contrary character in the case of the poet-statesman, M. de Lamartine, who, in his "Pictures of the East," relates that when resting at Yenikeni, a village in South Bulgaria, he was seized with "fièvre et une inflammation du sangue," probably pneu-

[1] THE LANCET, May 8th, 1880.

monia, which confined him for twenty days, at first without medical aid. But Madame de Lamartine was equal to the emergency. She sent out the Bulgarians to the marshes in the plain to look for leeches, which they discovered. Sixty of these annelides, applied to the chest and the temples, diminished the danger. The patient recovered consciousness on the sixth day of the fever. The danger already passed over, his friends at Adrianople having heard of his malady came to visit him with all sorts of remedies, leaving him in charge of a young Macedonian physician (educated at Semlin in Hungary) who spoke Latin; but his talents were unnecessary, the affectionate presence of mind and energetic resolution of the lady having supplied all that was required, the doctor's pleasant society being all that aided to complete the cure. While gratified by the immense advance in pathology since the date of the foregoing history, it may be questioned if there has been a corresponding progress in therapeutics all along the line—indeed, if there may not have been a retrogression in one important particular. I allude to the almost total disuse of topical as well as general depletion in modern practice. We have been so concerned with the microscopic investigation of the blood plasma, the number and behaviour of the red and white corpuscles, that we have undervalued to a great extent the importance of the macroscopic indications of dolor, tumor, calor, rubor. Yet in most cases of inflammation near the surface there they are and, unlike the hero's spouse, may not be explained away.

The pulmonic circulation was first clearly described in his "Restitutio Christianismi" in 1553 by the irreproachable, ill-starred genius, Miguel Serveto y Revés de Villanova; and if he had not then been judicially murdered by Calvin at Geneva he most undoubtedly would have completely anticipated Harvey by a full century. From a pathological point of view the minor or pulmonic may be esteemed paramount to the general circulation. The blood is duly oxygenated in the capillaries of the air cells, but it is imbued with more than oxygen. Every inspiration imbibes whatever may be floating in the aerial ocean in which we move—sulphuretted hydrogen, carbonic oxides, the microbes and germs that are present in the aerial strata with which we are brought in contact—all these are sent into the left heart cavities, irritating the endothelium and being propelled on to the remotest capillaries. In the vast agglomerations of human beings now concentrated in cities every item of which helps to poison his or her neighbours; and the morbific results show clearly of how much greater sanitary consequence is what we breathe than what we eat or drink, apart from specific contagion in our water or dietary.

The arterial blood, thus contaminated in its progress through the capillaries when meeting with local lesions, cellular or vascular local degenerations, accumulates and stays. Considering that our system is so much made up of vascular network the derangements from local congestion and stasis are easily explicable and the obvious relief from capillary drainage from leeching or cupping is as comprehensible. It appears to me that we have laid too much stress on the nervous system in our endeavours to relieve the suffering arising from inflammatory lesions and overlooked the soothing influence of unloading the affected tissues. Take, for example, the case of perityphlitis—a malady sufficiently tangible and in which it might be reasonably expected that the cutaneous circulation would be quite accessible for the relief of the congestion around the ileo-cæcal valve and appendix. In a modern book of reference we find rest, poultices and fomentations enjoined in the treatment of this disease. I have seen instances of such treatment followed by lingering distress, ending in death at the end of the second month, even though opium had been largely given. This drug to many seems to be the catholicon for most abdominal maladies. Very different was the issue when leeches had been freely and vigorously applied. Among our junior brethren there appears to prevail a vague fear of the depressing, enfeebling effect of local depletion. A leech may extract from a drachm to even three drachms of blood itself and the fomentations or poultices subsequently fully as much more; but when we take into account the entire mass of blood in the average human body we readily perceive the futility of this objection. In Hermann's "Grundriss der Physiologie des Menschen" (Blutmenge) Bischoff's estimate is one-thirteenth of the weight of the body. Welcker gives it at one-nineteenth in the newly born. The derivation of all abstracted by an ordinary application of these annelides need not give rise to any serious apprehension on this score. Pain is the most debilitating of all influences, and where pain is there is effusion. To diminish the latter is in the great majority of cases the best means of abolishing the former; hence the wisdom of the frequent injunction of our predecessors—"Put on so many leeches on the sore part."

Gowanlee, Slamannan, N.B.

ON MIGRAINE.

BY ALEXANDER WALLACE, M.D. OXON. &c.,
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I SUPPOSE that after a personal experience of over sixty years of this unsocial malady I might, perhaps better than others, have somewhat of use to say concerning it. I call it an "unsocial malady," because it often cruelly debars the sufferer from moving in society and enjoying family and friendly intercourse. I will relate my own experiences. My diathesis is gouty, though I have never had an acute attack; I have nodules in my ears and have often been troubled with eczema and pharyngeal irritation.

Personal experiences.—Migraine with me began early in life; I well remember when at school not infrequently experiencing severe headache followed by vomiting—one instance will never be forgotten. When about ten or eleven years old, one Saturday afternoon, I was unusually lucky at cricket, scoring over 100 runs off my own bat and coming back correspondingly hungry and tired. The next day I woke with a headache and, dimly forecasting the result, petitioned to be let off "church." "No, I must go," was the edict; so during the Litany, feeling bad, I sought my hat (in those days we always went to church in tall hats). Some delay arose in getting me one (not my own), so before I could get out vomiting took place, and out of respect to the sacred edifice I used the hat for a receptacle. How I got back, miserable, I forget; but next day I got a thrashing from the boy whose hat I had thus defiled, and at the end of the term a new hat was debited to my school account. Another sad experience, later in life, I may record. In my early professional career I was invited for the first (and only) time to the dinner table of a distinguished judge. I had dined out the day before with a relative and in consequence woke in the morning with a slight headache; I nursed myself all day, hoping to recover, but in vain. I had hardly got through my soup, sitting at my hostess's right hand, when the usual result followed and I had to beat a precipitate and ignominious retreat. Taught by bitter experience, many and many a pleasant social evening have I relinquished knowing well how dangerous it was for me to go. In my case migraine has certainly been a miserably unsocial and painful drawback. These attacks continued more or less frequently during my youth and during a ten years' residence in London, often prostrating me at a time when I wished to be at work or to be at my best in society. After settling in Colchester, thirty years ago, they at first remitted somewhat, but soon got so frequent as to come on regularly every Saturday. I then consulted the late Dr. Brinton, who advised me to try Aix-la-Chapelle or the top of a Welsh mountain. I went, however, to Harrogate and after a three weeks' sojourn came home in renewed health, though I was told that on my arrival at the hotel the other visitors pronounced me to be a promising candidate for the cemetery. For the next ten years I paid an annual visit to Harrogate, conforming to the customs of the place and deriving great benefit therefrom, until at length I learnt from my Harrogate experiences how to mitigate the virulence of my attacks and at last how to obviate them almost altogether. Now, though I go elsewhere for my holiday, I rarely suffer from an attack, but, in order to attain this end, I have to forego many social enjoyable evenings.

Description of an attack.—In my case the advent of a migraine is generally recognised on awaking by a desire to lie still and avoid all mental and bodily exertion; the head is hot, feels heavy and dull, if not already aching, the eyes lack lustre; the tongue is slightly coated, there is anorexia and some thirst; the urine is frequently pale and of light specific gravity. During the day the necessary work is done with much effort, fatigue and irritability of temper; the headache increases and about 4 or 6 P.M. compels me to lie down and cease from all further effort; later on the headache becomes more intense and throbbing and culminates in a copious acid vomit, after which relief and sleep come, and in the morning I arise free from headache but with a tired strained feeling and some muscular soreness. The temperature during the attack is

subnormal but rises after the vomiting, with free skin action and discharge of orange-coloured lithates in the urine; the contents of the stomach seem to be retained for hours and got rid of only by vomit.

Relief.—Now the lessons learnt from many attacks have taught me that a severe bout of migraine is relieved most certainly and completely by the concussion of vomiting, the stomach being thus emptied of its contents, circulation and absorption being restored. I have cut short (when absolutely necessary) the attack by an early hypodermic injection of apomorphia, but the remedy with the attendant depression and vomiting is as bad as the disease.

Treatment of an attack.—The severity of the headache is in my experience directly proportionate to the amount of the acidity of the gastric contents and it can be greatly lessened by the free imbibition of alkaline draughts—sal volatile, soda, ginger and peppermint with spirit of chloroform in a tumbler of cold water being with me a favourite and very effective drink. Two or three tumblers of this will almost certainly relieve the headache. Solid food is undesirable and rarely taken. Abstinence except from drink is the rule during the day. When vomiting is over, the exhibition of an alkaline drink such as I have mentioned is very agreeable to neutralise the stomach acidity, and then a few grains of blue pill, compound colocynth and extract of hyoscyamus will induce sleep and act like a charm.

Alkaline drinks.—The exhibition of alkaline drinks may be pushed further, and if used earlier in the day may relieve entirely the headache and prevent vomiting. I see in my out-patient room many cases of migraine, some severe ones, and I have often found that copious draughts of water during the day or night, a tumblerful at a time taken frequently up to two or three quarts in amount, prove very useful in mitigating the headache and aborting the attack. The *rationale* of its action seems to be that it dilutes, neutralises and washes onwards the acid contents of the stomach, promoting intestinal action.

Prevention.—As prevention is better than cure, I am now able after years of suffering to detect the early symptoms of a coming attack, and to commence treatment twelve or twenty-four hours in advance, so as to abort the migraine altogether. (See end of paper.) I have been able also to trace in myself the numerous faults either of habit or environment which produce migrainous headache, and so, recognising the exciting causes, have been able so to adapt my mode of life as now to escape almost altogether the dreaded evil.

Exciting causes.—First, then, in my case and in many others which I have treated I lay down the proposition that *a migraine is due to defective or insufficient excretion, partly of the liver but mainly of the kidney.* Migrainous patients will present a muddy, sallow complexion, a dull eye, yellowish conjunctivæ and a yellowish tint of skin. On inquiry you learn that the bowels are costive, not acting daily; that though the urine after an attack is high in colour and loaded with lithates yet before and during the attack it is pale and limpid and, if you examine it, of low specific gravity. You will find that just before the attack your patients are inert and lazy, probably complain of backache and are indisposed to mental and bodily exertion; they will tell you that after the attack they are more cheerful and bright, can enjoy their food and social intercourse and feel brisk for work, whereas just before the attack they are unduly irritable, short-tempered and nothing goes right with them. You will probably also on close inquiry get at a history of flatulence and eructation suggestive of liver congestion. All these little matters are to me now well recognised symptoms of the coming storm, yet for a long time they passed unnoticed; but thus forewarned I am able, as I shall show later on, either to minimise the evil or avert it altogether. Now, regarding migraine as produced by defective or insufficient excretion, chiefly of the kidney, two quite opposite conditions may be at work to excite an attack: (1) Where the abdominal and eliminating organs are less able than usual to perform their work and (2) where a greater onus is thrown on these organs than they can for the time being perform. Under Cause 1 may be classed check of skin action, exposure to cold, heated and vitiated atmospheres, tobacco (in some), alcohol, malt liquors, drugs, tea and other articles of food which act as economisers, lessening excretion, an insufficient imbibition of fluid, fatigue, nervous prostration &c. I have frequently noticed in my own case that after exposure to cold the urine is of light colour and of low specific gravity, and that a slight headache has supervened. Alcohol and malt liquors I have been unable to take for years, except in very small quantities, and that only occasionally. Any indulgence in this respect is invariably followed by headache. Tea is notoriously avoided by sufferers from migraine. I have noticed that in the month of November, when the atmosphere is loaded with damp, is anticyclonic and more or less impure from fog and smoke, with a low barometer, migraines are unusually prevalent.

It is hardly necessary to point out here that a scanty daily imbibition of fluid leads to insufficient intestinal and kidney action, inducing constipation and generally defective secretion and excretion, and is a common cause of anæmia. The converse of this is beautifully shown by the treatment carried out at Harrogate and similar Spas, where under the influence of water containing more or less sulphate of soda, sulphate of magnesium and chloride of sodium, exhibited externally by baths and internally by drinks, free excretion is promoted. The skin becomes clear and rosy, the evacuations are loose and free, the temper changes from irritable to joyous and the patient returns home rejuvenated.

Under Cause 2 may be mentioned over-exertion of body or mind, over-eating (a common cause), indulgence in saccharine and fatty foods, specially in jams, rich soups and stews, pastry and the like; interference with the digestive powers (which are generally weak) by irregular or too prolonged meals (our present dinners now often last three hours) or indigestible food, such as pork, salt meats &c.; insufficient mastication, mental or bodily exercise immediately following a principal meal, costiveness or constipation &c. These and similar causes interfering with the proper assimilation and excretion will in the case of sufferers from migraine prove exciting causes of an attack. It follows therefore that an individual so disposed should modify his environment and faulty habits (if any), and should lay down, and confine himself within, certain limits beyond which he dare not pass without risking an attack.

Prevention.—Prevention of migraine is the result of a due and well-balanced performance of assimilation and excretion, to maintain which a proper healthy exercise of mind and body, a careful dietary, regular hours and due intestinal and kidney excretion are necessary. To go more into detail. "In the sweat of the brow shall the bread be eaten" is very true of the sufferer from migraine. Energising till perspiration ensues, followed by a bath or good rub down and a change of dry clothing, promotes a healthy appetite and improves digestion. Great attention to this was paid by the Romans in the time of their emperors, and nowadays the social game of lawn-tennis supplies an admirable and pleasant exercise without undue fatigue. Then as regards excretion: It is said that when the mountain did not go to Mahomet he went to the mountain. If we cannot go to Harrogate or Aix-la-Chapelle, a tumbler or two of hot water while dressing in the morning containing sufficient mineral salts (including chloride of sodium) to produce a free loose stool after breakfast will help kidney action and not interfere with the digestion. Different aperient waters suit different individuals. I mention chloride of sodium advisedly as a necessary constituent because it induces thirst and thus paves the way to copious daily drinks, so that from three to four pints of fluid may be taken pleasantly during the day. I have tried Turkish baths, but they did not suit me and are far less pleasant than lawn-tennis, though to some they are very useful. As to diet, plenty of fresh food, fresh fruit, fresh vegetables, fresh butter, fresh meat (in moderation) and milk are desirable; no twice cooked dishes, no salted or pickled food, no jam tarts or treacle. In other words, while promoting excretion care must be taken to supply easily assimilable material. Above all eat sparingly and rise from the table still hungry rather than eat to repletion, a difficult habit for the young to cultivate.

To abort an attack.—If an attack be apprehended—and attacks will threaten from time to time—provided the warnings are recognised the day before, treatment should be at once commenced. The dietary should be spare, light and contain much fluid; nothing should be taken after 7 P.M. except a drink of milk and soda-water and a biscuit; the before-mentioned pill should be taken at bedtime and an alkaline draught in the morning while dressing, with the addition of iodide of potassium or salicylate of soda in a tumblerful of hot water. This will in all probability avert the attack. Migraines in the female are of a less robust character than in the male sex, as might be supposed from their different habits and environment, their generally anæmic condition and proneness to reflex excitation; but the exciting causes underlying an attack are much the same and may generally be detected. Scanty drinking and abuse of the teapot are frequent causes, while

anæmia and constipation claim many victims. Migraines are generally more prevalent among women than among men, and slight attacks, which are very common, often yield readily to caffeine or bromide of potassium.

I trust that these remarks may help my fellow sufferers to escape from the fetters of this dreadful malady.

St. John's-terrace, Colchester.

SEVERE OCCIPITAL HEADACHE; SUBCUTANEOUS INJECTION OF MORPHINE; RECOVERY.

By WILLIAM H. DAY, M.D., M.R.C.P. LOND.,
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ONE of the most severe cases of occipital headache of a purely neuralgic nature that I have ever seen came under my notice in May, 1892. A married lady, sixty-two years of age and the mother of six children, was much shattered in health from anxiety and care. She had been for twenty-five years a sufferer from nervous headache, traceable in a great measure to anæmia from excess of the catamenia in early married life and to recurring attacks of menorrhagia. Until the seizure now being related the pain at the commencement of an attack had generally been frontal, extending to the vertex, accompanied with great nausea, vomiting and loathing of food. After a period of variable duration the frontal pain in every instance was followed by severe neuralgia in the course of the fifth nerve, especially the supra-orbital, and auriculo-temporal branches on one or the other side. The symptoms varied however with the nerves affected, as is often the case. Occasionally the ophthalmic nerve, with its branches to the lacrymal gland and nose, was specially affected, when the conjunctiva became injected, and tears would run down the cheek. On other occasions the nasal nerve would be involved, and a sharp pain would extend down one side of the nose. Sometimes when the temporal and orbital branches of the superior maxillary nerve were involved the pain would be very severe, often fixing itself in the temporal fossa, owing to transference of sensation from communication with the deep temporal nerves. On other occasions the gustatory nerve springing from the inferior maxillary would be affected, and then the patient knew that headache was impending from a peculiar sensation on one side of the tongue and a free flow of saliva. Sometimes she was able to prognosticate an outbreak from a copious discharge of watery urine. Six months previously to this occipital seizure the patient's health had failed considerably; she was easily tired on exertion, she grew pale and worn, and on walking upstairs experienced some breathlessness, although the heart and lungs were sound. The attack began at 3 A.M. on May 7th, 1892, with a feeling of weight on the top of the head. Soon the patient could not obtain rest day or night. As long as she was able she would pace the room with open hands pressing on the vertex of the cranium. She vomited violently at frequent intervals, bringing up some greenish bile. The pain gradually increased in severity and the patient was so exhausted and restless from having obtained no sleep that on the following day (the 8th) at 2 P.M. a quarter of a grain of morphia was injected into the left forearm subcutaneously.[1] In a minute she was easy and in five minutes fell into a quiet, happy sleep, which continued on and off for twenty-four hours. On the 10th occipital headache came on again, and after lasting for forty-eight hours some relief was obtained by taking five-grain doses of quinine with ten minims of spirit of chloroform every four hours. Beef-tea and egg-and-brandy were taken freely. On the 13th there was more pain, and the patient was worn out from suffering and sleeplessness; the surface was cold, the pulse was contracted and weak, the eyes were lifeless and sunken in the head; the face was deathly white and the angles of the mouth were drawn down, giving the patient a most worn and distressed expression. Quinine in doses of five grains, brandy, champagne, strong beef-tea and eggs (a dietary which formerly almost invariably relieved the facial seizure) now failed to afford any relief. Bromides neither produced sleep nor allayed the pain. As the patient was going from bad to worse and as sleep was essential, after four nights and days of acute suffering, it was decided to again have recourse to the hypodermic injection of morphia (¼ gr.). This was carried out as before and in half a minute was followed by cessation of pain and tranquil sleep, at intervals for the ensuing twenty-four hours. When the pain was at its height, before the morphine was used, firm pressure with the open hand over the seat of pain afforded some relief and a bag of warm salt also mitigated it. A mustard-leaf to the neck, or a stimulating liniment of chloroform and aconite, gave temporary relief when the pain was not very acute. The pain was mainly referred to the course of the great occipital nerve where it pierces the trapezius muscle and over its cranial distribution as far as the vertex. Sometimes pain was also experienced over the upper and posterior aspect of the ear. In addition to the symptoms described, after the occipital pain was relieved, the patient experienced a painful sensation in the movement of the jaw and upper part of the neck. So numerous are the ramifications and connexions of the occipital nerve with the branches of other nerves, especially the trigeminal and ascending branches of the cervical plexus, in this situation, that they help to explain how the pain may extend from the occiput down to the mouth, teeth and lower jaw. No irritation was traceable to carious teeth, every stump having been removed for years before the seizure and mastication made good by artificial means. On the 20th the patient passed a restless and wakeful night, complaining of pain at the back of the head, but after rubbing the part with tincture of aconite and applying a stimulating liniment to the neck she slept at intervals. On the 22nd it was reported that she had passed a better night and the pain was of a slighter character, but it had extended to the cervical nerves, making it rather difficult to turn the head and open the mouth freely. She took food well. On the following day the pain had extended down the right arm and the attempt to lift anything with the right hand, which was very weak, immediately brought on a return of the pain. She also complained of stiffness of the right side of the waist. As soon as the patient was able to leave town she went to a quiet country place in a pure atmosphere and had two months of complete rest, seldom getting up till midday and retiring to bed at an early hour. On returning to town she took Levico water in the "mild" form daily after luncheon, and has continued doing so up to the present time. There has been no return of acute pain since, and the patient is now in better health than she has been for the last two years.

Remarks.—The effect of the subcutaneous injection of morphine in this case, as in many similar cases, is to tranquillise the patient at once and speedily to relieve the pain. All other remedies had failed one after another. On this and on many other previous occasions they proved utterly worthless. This mode of employing morphine improves the tone and quality of the pulse, brings warmth to the surface and removes the excessive exhaustion and collapse which are invariably present after the seizure has continued many hours. When the effect of the morphine has passed off the appetite is almost ravenous, and the quantity of stimulant, which in health would be certain to invite a headache, now keeps it at bay. When morphine is employed for the first time subcutaneously a small dose should be given, as some persons are peculiarly affected by it. It sometimes produces very serious symptoms, but I have not observed any in my own experience. Such cases are, however, recorded from time to time. Dr. Smuts of Caledon, Cape of Good Hope, sent to me a married lady thirty-nine years of age in August, 1892, suffering from severe neuralgic headache. He and other medical men had tried many remedies without avail and amongst them the hypodermic injection of morphine and atropine, which caused frightful emesis and other alarming symptoms without bringing relief. From the many disastrous consequences that have followed, as they certainly will follow, the repeated use of morphine subcutaneously employed we cannot be too cautious in very rarely resorting to it. It is only in such a severe case of headache as I have related, when pain and sleeplessness are wearing out the patient, that its use is justifiable. When employed with care, and at long intervals, it is not likely to damage chemically or physically the normal structures of the body and nervous system, but if resorted to at every severe paroxysm of headache, or whenever the patient clamours for it, he will be gradually brought into a pitiable state of mind and body.

[1] On some previous occasions in severe attacks of one-sided headache I have found one-sixth of a grain of morphia act far less quickly and efficaciously than a quarter of a grain, though I never begin with the latter. In this case I thought it better to give a full dose at once, as the drug had never previously occasioned any local or constitutional disturbance when hypodermically administered.

The severe nervous and neuralgic types of headache in the case in question were in a great measure owing to excess of the catamenia and attacks of menorrhagia from time to time in earlier years, by which the blood became impoverished and the general tone of the nervous system lowered. The mother and sister of the patient furnish a similar history. It seems reasonable to suppose that this state of things frequently lays the foundation of severe neuralgia, which does not happen in middle life when there is still resistance left, but comes on gradually with increasing years and declining strength. Clinical evidence, as in this case at least, supports the theory. Then if there is a frequent repetition of the attacks the muscles and nerves give way under slight provocation, the heart palpitates and becomes irregular in its action and that which at first was a purely neurotic condition may eventually merge into organic mischief. The nervous failure has invited it. As soon as the pain was relieved in this case we had to deal with an anæmic condition in which the blood was deficient in one or more of its constituents. So long as this continues a general state of debility is established leading to malnutrition and sometimes to chronic disease. The subjects of this form of headache, fearing a recurrence of the attacks of pain, are often afraid to take the necessary nourishment to support the system and they too frequently live under conditions not conducive to health in matters of air and exercise. To cure an anæmic tendency and to remove it when established are the best means of warding off recurring attacks of neuralgic headache. I have had many opportunities of observing the good effects of Levico water ("mild") in these cases. It has when continued long enough imparted colour to the cheeks and removed some of the uneasy sensations, as breathlessness, palpitation &c., when the blood is deficient in hæmoglobin. Differences of opinion have arisen as to whether the iron administered is actually absorbed. It seems to me that it is. Hamburger and others consider that very little is absorbed from the abdominal canal. The quantity of iron, says Dr. Halliburton, in the whole body is only three grammes, and this quantity is taken many times over during treatment.[2]

A RARE FORM OF DOUBLE PYOSALPINX.

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IN December, 1891, I was asked by Dr. Cullingworth, who was ill at that time, to see and if necessary to operate on a young lady who had an abdominal tumour. The patient aged twenty-six, had been married five years, but had never become pregnant. Ever since marriage coitus had been painful, but latterly the pain was very severe. Seven years ago she was laid up with pleurisy and was tapped on the right side. Six months later she had an attack of abdominal inflammation and kept her bed for some weeks, during which time her abdomen was much swollen, the circumference below the umbilicus measuring thirty-two inches. As she recovered from the attack the swelling subsided and her figure resumed its normal shape. A few months later she married, and during the subsequent five years enjoyed very fair health. In October, 1891, she complained of pain in the lower part of the abdomen and thought she could feel a swelling there. Dr. Fawson Lee of Salisbury was consulted, and he, recognising the gravity of the case sent her to London for further advice. She was taken to a house in Harley-street, where I saw her in consultation with Dr. Lawrence Copeland the day after her arrival. On examination a large elongated swelling, centrally situated and reaching to the umbilicus, was detected. It was freely movable from side to side, but was not tender to touch. The uterus was pushed up in front of the tumour and could be distinctly felt through the abdominal walls. Bimanually the lower part of the tumour was found to occupy Douglas's pouch, from which it could not be dislodged. On the left side of the uterus was there another large fixed swelling, which filled the pelvis on that side. The sound passed into the uterus two inches and a half, but that organ could not be separated from the two swellings. No fluctuation was detected in the tumour either by abdominal or pelvic examination. The diagnosis arrived at was: "Two tumours of somewhat doubtful nature; the central one probably ovarian and that on the left side a distended Fallopian tube." I decided to operate with as little delay as possible.

On Dec. 11th Mr. Stormont Murray administered ether, and assisted by Dr. Copeland, Dr. Fawson Lee also being present, I proceeded to open the patient's abdomen. Difficulty was experienced at the very outset of the operation, owing to the omentum being extensively adherent to the abdominal wall in the line of incision, it being necessary to enlarge the opening to the extent of five inches. On introducing my fingers into the abdominal cavity there seemed to be four distinct tumours—the central swelling, the body of the uterus, and the left Fallopian tube enormously distended and bent upon itself in the shape of a horseshoe. The central tumour was intimately connected with the posterior surface of the uterus, its lower portion being fixed in the recto-vaginal pouch, and thus pushing the uterus upwards and forwards.

FIG. 1.

A distended Fallopian tube.

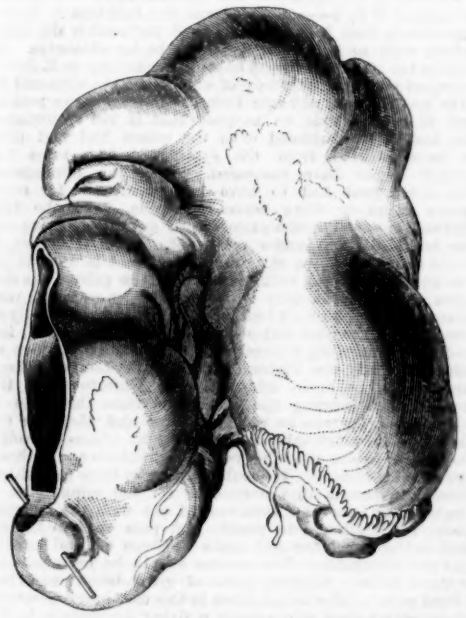
The whole surface of the tumour was surrounded by adherent intestine and omentum, the separation of which was most difficult and tedious. I succeeded, however, in removing the tumour unruptured and controlled the rather free hæmorrhage by packing sponges into Douglas's pouch. The tumour on the left side was then dealt with, and its enucleation and removal gave considerable trouble owing to extensive intestinal and pelvic adhesions. In both cases the ovaries were so closely attached to the uterus that it was impossible to ligature the tubes without including fragments of ovarian tissue. The adherent omentum was then separated from the abdominal peritoneum and all the bleeding points were tied with fine silk. I did not wash out the peritoneal cavity or drain, but carefully sponged out the pelvis and then closed the wound with silk sutures. The operation lasted over two hours and a half, but the patient after removal to bed had a capital pulse and did not show any signs of exhaustion. She rallied

[2] Text-book of Chemical Physiology and Pathology, 1891, p. 300.

soon, had no sickness to speak of and made a rapid and excellent recovery. The history of this case, taken with the matted condition of the intestines and the adhesion of the tubes to them and to the pelvic organs, distinctly points to the attack of abdominal inflammation as the starting point of the tubal disease. I quite expected to find the contents of both tubes offensive, but on opening them after removal the pus that escaped was creamy and not in the least degree fetid. It is somewhat remarkable that a woman with two such tumours should have enjoyed good health and have been able to ride and drive up to the time of her operation without any ill effects. Had the tubes burst during such violent exercise the result would have been disastrous, if not actually fatal, within a few hours.

This is the third consecutive case in which I have succeeded in removing adherent and distended tubes unruptured, and during the last ten years I have had many opportunities of assisting at operations for the removal of diseased and dilated tubes. It is the practice of some surgeons to aspirate or use a small trocar in such cases, and when they have emptied the tubes they then proceed to remove them. Speaking from

FIG. 2.



A distended Fallopian tube, doubled upon itself.

my own experience I prefer, if possible, to remove the tubes unemptied and unruptured, for once the contents are withdrawn it seems to me that the operator loses his landmarks and the difficulties of the operation are increased tenfold. In the cases where I have seen intestines torn or pelvic organs injured I have noticed that the injury invariably occurred subsequently to the emptying or rupturing of the dilated tube. When operating on such-like cases I endeavour to use the pulp of my fingers as much as possible, working them as one would a sponge when dealing with intestinal adhesions, and thus keeping the finger-nails away from the tubes. This method is of course tedious and cannot be carried out in every case, but it is undoubtedly safe and in my opinion worthy of a trial. I am convinced that irremediable injury may be inflicted on the intestines and on the pelvic organs by injudicious scraping and by digging with the finger-nails into the depths of the pelvis where the parts are completely hidden from sight.

I have much pleasure in acknowledging the valuable assistance rendered by Drs. Copeland and Fawson Lee during the operation. My thanks are also due to my friend Mr. Stormont Murray for his skilful administration of the anæsthetic and to Mr. J. Bland Sutton, who very kindly undertook to examine and report on the specimens, which were exhibited at the February meeting of the Obstetrical Society. His report is as follows: "The cysts are enormously distended Fallopian tubes. Sections prepared from them exhibit a thin layer of muscle tissue lined internally with granulation tissue. There are no traces of epithelium, and the mucous membrane has completely disappeared. Large dilated tubes of this character differ in many points from the common forms of pyosalpinx secondary to septic endometritis and gonorrhœa. I have only seen two other examples similar to these specimens, and until more is known of their pathology they should stand in a separate class." The illustrations were executed by Mr. Henry R. W. Lewin.

N.B.—Dr. Fawson Lee informs me by letter dated October, 1892, that the patient is now quite strong and well. She has gained flesh and is in excellent spirits. There has been no complaint of dyspareunia since the operation. A regular catamenial period occurred in March and has recurred about every month, much the same in quantity, but varying somewhat as to time and unattended by any pain.

Brook-street, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. THOMAS'S HOSPITAL.

NOTES OF A FATAL CASE OF STRYCHNINE POISONING; REMARKS.

(Under the care of Dr. JOHN HARLEY.)

FATAL cases of poisoning by strychnine in which the patient lives long enough for the symptoms and course of events to be carefully noted being of rare occurrence, the following notes taken by Dr. Cuthbert Wyman, formerly house physician to St. Thomas's Hospital, to whom we are indebted for them, will be found of interest. We commented in THE LANCET some months ago[1] on the fact that strychnine had been used somewhat frequently during the last few years for the purposes both of suicide and homicide, and pointed out the ease with which the poison could be obtained in various compounds and the danger which this was to the public health. There was another aspect we dwelt upon and which we considered of importance—that was the possibility of mistaking the symptoms for those produced by "natural causes." While the symptoms of strychnine poisoning are well known they vary very much according to surrounding circumstances. When the dose has been large the tetanic spasms will be well marked, but when a minimum fatal dose has been given these will be modified into a species of convulsions which may be regarded as unconnected with poison. Hence the importance of not only observing the symptoms of any sudden attack of convulsions very carefully, but also of duly weighing all the surrounding circumstances, the previous taking of food or medicine, the absence of any former similar attack and the appearance and manner of those around. It is curious that the rapidity with which the symptoms of poisoning developed in these cases varied so much. The patients were young women of about the same age, and the contents of the stomach in each and the amount of poison taken were presumably similar; yet one died almost immediately and the other lived for about five hours and a half. In 1889 we published notes of a case under the care of Mr. H. C. W. Jones,[2] where recovery followed treatment for strychnine poison, the quantity swallowed being estimated at

[1] THE LANCET, vol. i. 1892, p. 1375.
[2] Ibid., vol. i. 1889, p. 165.

six grains; Mr. Lyster[3] of Coleshill also described a case where recovery followed after a patient had probably taken two grains and a half of the alkaloid; and Mr. Fegen[4] described the symptoms in a fatal case where it was supposed that from two to three grains of the poison had been taken. Dr. Bingham[5] of Alfreton was also engaged with a fatal case of poisoning from this drug. Dr. Wyman's suggestion with regard to the continued administration of chloroform appears a practical one. With regard to some of the antidotes which have been more recently recommended, Anrep[6] thinks urethan superior to chloral hydrate and advises the administration of one to one and a half drachms when a poisonous dose of strychnine has been taken. Dr. C. Sanquirico[7] recommends intravenous injections of a considerable quantity of an 8 per cent. soda solution, which will produce an active diuresis and assist in eliminating the poison. J. S. Horsley[8] in a case of strychnine poisoning injected apomorphine in doses of from one-fifteenth to one-tenth of a grain subcutaneously and "completely subdued the convulsions and eventually successfully antagonised the excitant alkaloid."

At 3 A.M. on April 12th, 1892, two women were brought to the hospital said to be suffering from the effects of poison through eating tinned salmon. It appeared that they had both dined off tinned salmon at 7 P.M. on the evening of the 11th and supped off the same substance at 2 A.M. on the 12th. But one of the women, E. S——, also stated that a man who left their house just before their supper at 2 A.M. had given them each "three long narrow pills" (capsules). The exact time at which the unfortunate women swallowed the pills could not be ascertained. At 2.30 A.M. their screams aroused the landlord, and a policeman who was called in brought them to the hospital, having first given them each a mustard-and-water emetic, but without the production of vomiting. One of the women, A. M——, died on the way to the hospital. The other, E. S——, was alive and when first seen was sitting in a chair apparently quite well. Within a minute or two she had a convulsive attack in which, owing to the straightening of her back, she slipped off the chair on to the floor. An emetic (40 gr. of sulphate of zinc) was given, but without effect. The stomach was then washed out several times with tepid water and half a tumblerful of thick charcoal-and-water given her to drink. During this time the patient was having convulsive attacks every four or five minutes. The attacks were of the following character: The patient suddenly became quite stiff, the back rigid and arched, with rigid flexure of arms and rigid extension of legs and feet. The rigidity was very marked during the greater portion of the attacks, which usually lasted from one minute to a minute and a half. But towards the end of the attacks, sometimes from the beginning, there were spasmodic movements of legs, arms and back. The pupils were equal, semi-dilated and reacted to light. The pulse was even but rather accelerated. Respiration seemed to stop during the attacks. The patient recovered from these fits almost as quickly as she entered them and in the intervals between them was perfectly conscious and rational, only complaining of a little stiffness of the legs and dryness of the throat. The attacks came on at fairly regular intervals, but whenever she received any external stimulus—such as change of position, the attempt to drink or even, on one or two occasions, the sound of pouring fluid into a glass—she had a fresh attack. The attacks were frequently preceded by a loud cry. As the fits did not abate in frequency or severity chloroform was administered at about 4 15 A.M. and while under its influence the patient was removed to Christian ward. While being put to bed the effect of the chloroform partially passed off and the patient had another attack, in which she became greatly cyanosed and respiration was suspended. It was only after some minutes of artificial respiration that she again began to breathe. Chloroform was then again administered, and the patient was kept deeply under its influence until 7 30 A.M., during the whole time of its administration breathing quietly and maintaining a firm, steady pulse. At 7.30 it was discontinued under a false hope of security, and as its effects began to wear off the patient had three more convulsive attacks, in the last of which she died, although artificial respiration and chloroform were again resorted to. Death took place with extreme cyanosis at 7.45 A.M., about five hours and a half after swallowing the pills. The urine, which had been retained since admission, was drawn off by catheter at 7 A.M., and was found to contain a trace of albumen and a deposit of urates. It was afterwards analysed by Mr. White, the hospital pharmaceutist, who discovered in it one-twelfth of a grain of strychnine.

The post-mortem examination showed no sign of any organic disease in either case. In both cases the blood was very dark and fluid. In the case of E. S—— the right side of the heart was distended with soft, black clot and the lungs were full of blood and were œdematous. In the case of A. M—— both sides of the heart were empty, but the lungs were in the same condition as those of E. S——. The stomachs, with their contents, a portion of liver and one kidney from each case were removed and forwarded to Dr. Stevenson, Government analyst, for examination. He reported the results of his analysis as follows:

E. S.—Vomit contained	1·46 gr.	strychnine.
Stomach and contents ...	1 60	,,
Liver and kidney	0 20	,,
Total	3 26	,,
A. M.—Stomach and contents ...	6 39	,,
Liver and kidney	0 40	,,
Total	6·79	,,

Remarks by Dr. WYMAN.—The symptoms as above detailed in the case of E. S——, coupled with the fact that A. M—— had already died from the effects of presumably the same poison, were so characteristic as to be unmistakable. As regards the treatment it may be said that as long as E. S—— remained under the influence of chloroform she appeared to be in no danger, at any rate from the effects of the poison. And it is reasonable to suppose that if the administration had been continued until the poison had had time to be eliminated from the system by the urine the patient might have recovered. That the administration would have had to have been continued for some twelve hours or more seems probable from the fact that only one-twelfth of a grain was so got rid of during the five hours she was under treatment. From this, then, it would seem that if the chloroform treatment is used at all it must be continued until all trace of the poison has disappeared. This can only be determined by watching very carefully for any sign of twitching of muscles, especially of those about the eye and mouth, during the period immediately succeeding the cessation of the administration of chloroform. If the slightest twitching is observed chloroform should be again administered. Unfortunately, the process of separating the strychnine from the urine is rather a lengthy one in point of time and therefore not likely to be of much value in this respect. Charcoal readily absorbs strychnine and other vegetable alkaloids and is therefore a useful remedy. It should be given in large quantities, allowed to remain in the stomach for ten minutes or a quarter of an hour and then washed out with the stomach pump, for if allowed to remain and pass on into the intestines the strychnine will again be given off and carried into the circulation. The process should be repeated two or three times. Another point of great importance from a legal point of view which arose in this case is the question, When, with a view of obtaining a dying declaration, is the medical attendant justified in telling the patient that he is dying? Any description of the murderer or other statement concerning the crime cannot be brought as evidence against a prisoner unless it can be proved that the victim at the time of giving it believed that he was actually dying and would not live many hours. In this case I did not feel myself justified in telling the patient that she was dying and therefore her statements were not allowed as evidence at the trial. It must be remembered that a living witness is better than a dead one, and anything tending to add to the risks of death in a doubtful case should be avoided. If, on the other hand, there can be no doubt that a fatal result is imminent, I think it is the medical attendant's duty to tell the patient plainly what his condition is, and so possibly assist justice and protect other people from a similar fate.

[3] THE LANCET, vol. i. 1889, p. 643. [4] Ibid., vol. i. 1889, p. 951.
[5] Ibid., vol. i. 1889, p. 395. [6] Sajous, 1888, vol. v., p. 125.
[7] Ibid, 1890, vol. v., p. 96. [8] Ibid, 1892, vol. v, p 25.

TORBAY HOSPITAL, TORQUAY.

A CASE OF ACUTE MYELITIS; COMPLETE RECOVERY.

(Under the care of Dr. POWELL.)

As Mr. Watson, the house surgeon, to whom we are indebted for the notes, observes, complete recovery from acute

myelitis is rare.[1] Dr. Wilks in his "Lectures on Diseases of the Nervous System" only quotes two cases and Dr. Pye-Smith mentions a case in "Fagge's Medicine." The cause in this case was most likely exposure to wet and cold and most probably the former had more to do with it than the latter. The suddenness of the attack was well marked, and retention of urine was one of the earliest symptoms. The patient improved gradually, but his improvement was seen from the day of his admission, so that it is somewhat improbable that the iodide of potassium had any beneficial effect, as this was not prescribed until two days after his admission to hospital. The absence of bedsores was in the patient's favour and every care was taken in preventing them, the patient being put on a water-bed and the skin of the back, buttocks and heels daily washed with methylated spirit and dusted with zinc and starch powder. One half of the spinal cord appears to have been more involved than the other half, as the paralysis was always more marked on the right side.

S. G——, aged forty-three, a trawler, was admitted on July 28th, 1891, complaining of paralysis of the lower extremities, slight pain in the lumbar region and retention of urine. The patient was a strongly built, dark-haired man about six feet in height. He gave the following history. A week before the commencement of his present illness he was cutting grass with a pair of shears and had to sit and lie about on the wet ground. He continued this occupation for a week. On July 18th he noticed that his feet felt "numb and dead" and in the afternoon he could not pass his urine and was obliged to send for his doctor and have it drawn off. The feeling of numbness extended from the lower part of the abdomen and down the thighs and legs. On the 21st his legs felt worse and he could not walk; the right leg was worse than the left. At the beginning of his illness he suffered from pain in the back; this was more marked on trying to sit up in bed. Fifteen years ago he had gonorrhœa, but had never had syphilis. He had been strong and healthy up to the time of his present illness. The heart and lungs were normal. Temperature 99°; pulse 68, full, regular and not easily compressible. The legs and thighs were well developed, but the muscles felt distinctly flabby. He had complete paralysis of the right leg, but he could move the left leg very slightly. There was no plantar or cremasteric reflex on either side. Both patellar reflexes were increased, but more so on the right than on the left side. Ankle-clonus was well marked on both sides. Sensation was altered on the plantar surface of the feet; he could not feel the prick of a pin, but stated that he felt something touching him. This modified sensation was also present on the legs and thighs, but was more marked on the plantar surface of the feet. The catheter was used to draw off urine, and as the urine was alkaline and ammoniacal his bladder was washed out twice a day with hot boracic lotion. His bowels were constipated, but before the illness he had always been regular. He was given a light diet, and a mixture of iodide of potassium (5 gr.) with carbonate of ammonia and gentian was ordered. This mixture was continued for three weeks. He had then gained more power in the legs, the right leg was still worse than the left and the muscles felt softer. His bowels were very troublesome and only acted after an enema. He continued to improve and on Oct. 8th the following note was made. The patient's gait has much improved, he can now walk long distances without fatigue, but in walking he seems to bring his feet rather too suddenly down, and sometimes he totters slightly. The muscles of both legs feel much firmer. The right knee-jerk is still much increased and the left slightly, there is no ankle clonus. He passes urine about every five hours during the day and gets up once or twice in the night to pass it. He has been taking four minims of liquor strychniæ three times a day since Aug. 19th.

The patient left the hospital on Oct. 13th, and has been under observation since. He has been in his usual health for some months. He can walk long distances without fatigue and has resumed his occupation as a trawler. The muscles of both legs have completely regained their normal tone, his gait is quite natural and he has no increase of knee-jerks. The urine is acid and he has no trouble in passing it. His general health is now very good.

[1] See also Bristowe: Theory and Practice of Medicine.

THE NATIONAL LEPROSY FUND.—It is understood that a few advance copies of the report of the Leprosy Commissioners may be expected to arrive in England in the course of the present month.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Effects of Iodides on Arterial Tension and Excretion of Urates.

AN ordinary meeting of this Society was held on Jan. 10th, Dr. George Harley, Vice-President, in the chair.

A telegram from the President was read announcing his inability to be present and asking the Society to welcome Dr. Mirza Ali, chief physician to the Shah and Professor of Medicine in the University of Teheran, who was on a visit to this country. He was accompanied by Hussein Kuli Khan, Secretary of the Persian Legation, and he presented to the library of the Society copies of his medical works in Persian and French.

Dr. A. HAIG read a paper on the Effects of the Iodides on Arterial Tension and the Excretion of Urates. He referred to an article of his in vol. lxxi. of the Transactions on drugs which diminished the excretion of urates. The list of substances which had this action had now been greatly enlarged and he believed that the iodides must be added to it. He also believed that the action of these substances on the solubility and excretion of urates would explain a large part of their value and utility in medicine and surgery, just as he had previously said elsewhere with regard to opium and mercury, which acted in the same way. He was at first misled by his results with the iodides, and was further hindered by their affecting the process which he had used for the estimation of uric acid (Haycraft's). These difficulties were, however, got over, and with greater knowledge and experience of the working of certain laws which govern the excretion of urates and of water he now believed that it was possible to speak more decidedly as to the action of iodides. One of these laws was that first formulated by the writer at the beginning of 1889[1]: "that, *cæteris paribus*, arterial tension varied with the uric acid that was circulating in the blood." Another was that from day to day and from hour to hour in physiological conditions the urinary water varied inversely as the uric acid was excreted along with it. Another was that in physiological conditions the excretion of urates in the urine varied inversely as the acidity of the urine. And another, that the amount of urate in the urine was relatively to the urea, to a certain extent an index of the amount of urate passing through the blood. From these it followed that arterial tension varied with the amount of uric acid that was being excreted in the urine. But arterial tension meant contracted arterioles, and contracted arterioles meant that water had difficulty in passing the kidneys, as was shown to be the case in the parallel action of digitalis and other drugs which contracted the arterioles, and this was the reason why the urinary water varied inversely as the uric acid. The diuretic action of iodides was well known, and the writer showed four figures which demonstrated that at the time an iodide was causing diuresis it was also causing a diminished excretion of urate and that the one thing was related to the other as cause and effect. The figures also showed well the inverse relation of urates and water in excretion; also that under the influence of iodides the excretion of urate ceased for a time to bear its usual inverse relation to acidity. But the writer pointed out that some twenty drugs, or rather groups of drugs, all diminished the excretion of uric acid in the urine, and at the time they did this they produced also relaxed arterioles, lowered arterial tension and diuresis. Then iodides could be classed along with these drugs, and as the latter could further be broken up into three groups according to the way in which they produced the diminished excretion of uric acid it might be possible to say which of the groups the iodides most resembled in their mode of action. He pointed out how this action of iodides on the solubility of urates, and so on the contraction of arterioles, enabled us to explain all their most important effects in physiology and pathology, just as he had previously pointed out in the case of opium and mercury. Lastly, he referred to his previous writings on uric acid as a cause of high arterial tension and suggested that there was no possible explanation of the parallel action of all these drugs except that which he had given—namely, that urates contracted the arterioles all over the body and

[1] Brit. Med. Jour., vol. i. p. 291.

raised arterial tension, while their absence from the blood stream, however produced, allowed these vessels to dilate. The action of iodides on arterial tension was thus completely explained by their influence on the solubility and excretion of urates.

Dr. GEORGE HARLEY said that in latter years pathology had entered on a new phase, the scalpel and the microscope giving place to the test-tube and the balance. He held that it was through chemistry alone that the secrets of morbid action could be discovered. The diseases arising from anomalies in the behaviour of uric acid were manifold, and he could bear personal testimony to the fact that when colchicum could not be borne in gout iodide of potassium would give great relief. Certain individuals were more prone to form uric acid than others, so were certain families and in certain districts. Uric acid was very common among the ancient Egyptians. Many theories had been advanced as to the cause of its formation; it had been thought to be a transition stage in the formation of urea and it had been considered to be due to a too high oxidation. The dog had no uric acid in his urine, though he fed much as his master did, and the calf had uric acid in its urine though the cow had none. These peculiarities were as yet unexplained.

Professor MIRZA ALI said that gout was not unknown in Persia, but it was only met with among the rich; the poor did not eat animal flesh at all. The only collections of uric acid found were in the joints; he had not met with them in the kidneys or bladder.

Sir WILLIAM ROBERTS found that he could scarcely intervene in the discussion with much advantage. He had been following Dr. Haig's work for years, but he thought that a too continuous study of one subject led to something like mesmeric dazing and diminished an author's experimental resources. His three years' work on this question had led him in an opposite direction to Dr. Haig. He had found that the uric acid varied conformably with the amount of water. Dr. Haig had stated that the alkalies increased the capacity of the blood for dissolving urates, but no general statement such as this could be apposite, for what was true with regard to uric acid was false for urates. It appeared to him chemically impossible that uric acid could exist free within the body, and according to his own reflections it was unnecessary to assist its solubility. He knew of nothing which affected the solubility of bi-urates in blood-serum outside the body, and his experience was that rendering the serum more alkaline rather diminished its solvent power. He regarded uric acid as harmless so long as it remained in solution; it only became troublesome when thrown out. He doubted more and more whether uric acid covered the whole field of gout or whether the latter was not a much larger subject. He was inclined rather to believe that if uric acid were withdrawn altogether gout would still remain as a clinical and pathological entity recognisable as such.

Dr. SANSOM said that the paper of Dr. Haig and the contribution of Sir William Roberts were directed rather to what used to be called the "humeral" aspect of the subject. Though he did not wish to throw doubt on this side of the question, he believed it should occupy the background, being deuteropathic rather than protopathic. That the iodides had a marvellous power of reducing arterial tension could not be denied; in sacculated aneurysm and in angina pectoris their favourable action in relieving pain and distress was marked. But he questioned if the relaxation of intra-arterial strain were really due to an action on the fluids of the body; he regarded it rather as some action through the nervous mechanism whereby the arterial tension was relieved. Iodide of ethyl inhaled was often followed rapidly by the relief of symptoms, and he doubted if, in the few seconds which elapsed, the drug could act in the manner Dr. Haig suggested. The amount of arterial tension depended not only on the contraction of the arterioles, but on the force of the left ventricle, and the free excretion or otherwise of urine depended on both these factors: it was a question of correlation of peripheral resistance with a weak or strong left ventricle. He asked if in an attack of acute gout the arterioles were usually contracted; he had seen marked dicrotism of pulse during this stage. He thought the evidence brought forward must be carefully weighed in the light of clinical experience.

Dr. HAIG, in reply, said that, as to the proneness of certain groups of people to the formation of uric acid, he doubted whether there was really a plus formation or whether more uric acid was not retained in their bodies. Excessive formation was entirely due to meat diet. Gout and calculus were to a certain extent the opposites of each other. Gout occurred with a minus excretion, the uric acid being retained; calculus occurred with a plus excretion, the uric acid being cast off. Sir William Roberts had obtained his opposite results by working in the laboratory. He himself could make the headache vary absolutely with the amount of uric acid present in the body. He had experimented largely with nitrite of amyl and nitro-glycerine. It took seven or eight minutes before the maximum effect on arterial tension was produced with these drugs, and this allowed ample time for the substance to act chemically on the blood. There was very little uric acid in the blood during an attack of gout and the arterioles at that time were relaxed.

OBSTETRICAL SOCIETY OF LONDON.

Backward Displacements of the Uterus.—Vaginal Hysterectomy.

A MEETING was held on the 4th inst., Dr. J. Watt Black, President, in the chair.

The following specimens were shown:—

Dr. HANDFIELD JONES: Calcification of Fibroid.

Dr. LEITH NAPIER: (1) Fibro-myoma undergoing Degeneration; (2) Several Gynæcological Instruments.

Dr. WHEATON: (1) Bony Parts removed from Dermoid Tumour; (2) Bilateral Cephal-hæmatoma.

A paper by Dr. HERMAN on the Frequency of the Local Symptoms associated with Backward Displacements of the Uterus was then read, the communication being based on an analysis of 407 cases of the abnormality. He found that chronic pain of some kind is present in nine-tenths of the cases of backward displacement of the uterus. The most frequent seat of pain is the back, generally the sacral region. Next most often come sensations of descent and unilateral pains, chiefly in the ovarian region, cases of left-sided pain outnumbering those of right-sided pain in the proportion of three to one. In a small proportion lower abdominal pain is the chief complaint, and in a very small minority trouble in locomotion is the prominent symptom. Pain in defecation is present in less than half the cases. In the majority of the cases in which it is present it is accounted for either by constipation or by morbid conditions of the rectum. Dr. Herman estimates the proportion of cases of backward displacement of the uterus in which the displacement is the sole cause of painful defecation at about one in nine. Backward displacement of the uterus has no appreciable effect as a cause of painful micturition; but bladder irritation due solely to the displacement is present in about one case in five. Leucorrhœa is not commoner in cases of backward displacement of the uterus than among other patients. Dyspareunia is present in at least one-sixth, and probably in a large number; absent in at least one-seventh.—Dr. HANDFIELD JONES pointed out that Dr. Herman, while tracing the connexion of pain at various points with backward displacement of the uterus, had made no reference to the condition of the misplaced organ, for in some cases it caused no symptoms, whilst when inflamed and acutely tender it did give rise to great suffering during defecation or coitus. Sometimes the ovaries were also prolapsed, enlarged and tender, and were the real cause of the pain complained of.—Dr. CHAMPNEYS agreed that the explanation of the frequency of left-sided pain was that that side was the "weaker," that this was not due to pelvic causes was proved by the frequency of other left-sided pains, and especially left sub-mammary pain. Pain in the bowels was generally due to intestinal causes. The unimpregnated uterus could not conceivably exert any injurious pressure on either the bowel or the bladder; its weight out of the body was about an ounce, and as about half of this was lost by the pressure of the surrounding soft parts, it could only exert a downward pressure of some half ounce. The only other theory of pressure was that due to impaction; the conjugate of the pelvis was about four inches, the extreme length of the uterus not more than three, if flexed still less; so that impaction was impossible. The immediate effect of bearing down was not to increase but to diminish retroversion and flexion, the centre of the pelvic diaphragm descending more than the sides. Generally speaking, backward displacements were signs of descent. He was rather surprised to hear that catarrh was not common among patients with backward displacement. In his experience the association was very common, and both were signs of absence of tone in the pelvic soft parts. He had seen two cases a little while ago which illustrated this association—two ladies

from India had uterine catarrh and descent with retroversion. After the application of two zinc-alum points, without rest in bed and without a pessary, the uterus had returned into its place and the backward displacement had gone. With respect to dyspareunia, this was a wide term and there were at least two principal forms—one in which the pain was associated with spasm of the vaginal orifice and the other due to deep tenderness, generally from some inflammation about the ovary or tube. In such a case there was often tenderness on pressing the uterus, which was not really tender but pressed against the adjacent tender organ. It was often described as tenderness of the uterus, but incorrectly.—Dr. GERVIS did not agree with the opinion that backward displacement of the uterus was but a stage of prolapse, although unquestionably retroflexion without descent was of far less importance than when it occurred with it. Speaking generally, he thought that flexions, if uncomplicated, were of but moderate importance, but if associated with cervical stenosis or endometritis they became of considerable importance. He further believed that in many of the cases where there was associated ovarian pain the pain was due to a subovaritis whose starting-point was endometritis, and that this endometritis was in its turn due to the interference with normal menstruation induced by the flexion.—Dr. HERMAN, in reply, said that, in his opinion, uncomplicated retroversion or flexion of the uterus caused no symptom of any kind. Had the cases on which the paper was based not been complicated the patients would not have applied for treatment. Some years ago it was believed by many that every complication that existed along with a displaced uterus was the consequence of the displacement. Some had gone to the opposite extreme and regarded backward displacement of the uterus as being always a bagatelle and the presence of symptoms with it merely a coincidence. He had compiled this paper to help himself to a correct idea of the frequency with which backward displacement was really the cause of symptoms existing along with it. It was not possible to settle the question of reporting individual cases, because the interpretation of individual cases depended on the general principles previously adopted by the observer, which he could not prevent from biasing his judgment; therefore he (Dr. Herman) had adopted the statistical method set forth in his paper. He did not accept the views put forth by Dr. Gervis, and for two reasons: First, if retention of menses was produced by flexion of the uterus, how was it that no one had ever yet produced a uterus dilated by the retained fluid? Secondly, if displacement backward caused the ovaries to be tender by producing salpingitis and oöphoritis, how was it that (as the displacement was not unilateral) this state of things was produced three times as often on the left side as on the right?

Dr. CULLINGWORTH next communicated a note supplementary to a paper read before the Society on April 2nd, 1890, on Vaginal Hysterectomy, giving the subsequent history of the cases. Of these, one lived for two years and two months, one for a few days short of two years, and the third for a little over seventeen months. Two enjoyed perfect health until within a few weeks of their death. In each of these cases death resulted from intestinal obstruction, the cause of which in one case remains unknown; in the other it was pelvic adhesions, the only signs of recurrence being a single enlarged gland and a small ulcer in the vaginal roof. In the third case the history showed restoration to fairly good health for six or eight months, then gradual failure for twelve months, and finally six months of absolute confinement to bed, death occurring from kidney disease due apparently to implication of the bladder and ureters in the recurrent growth. The patients with columnar-celled carcinoma lived longer than the one in whom the disease was of the squamous-celled variety.—Dr. PLAYFAIR said in his opinion the whole subject of the surgical treatment of uterine cancer was still *sub judice*, and neither total extirpation nor supra-vaginal amputation could be considered, so far as our present experience went, as anything but very unsatisfactory procedures, affording the patient the chance of prolonging her life in comfort for a greater or less length of time, but which, so far as existing evidence went to show, did not give a reasonable hope of complete cure. The important point to settle was, which of these procedures affords the patient the best chance for the future? He had operated in a large number of cases by supra-vaginal amputation, but sooner or later the disease had recurred in all. Nor is the immediate danger altogether a negligible quantity. He did not know of any reliable statistics on this point, but he observed that in a recent paper read at the Gynæcological Society advocating this procedure death had been stated to follow in two out of twenty-four cases (about 8 per cent.), which represents an initial mortality but little less than that of total extirpation. He thought it must be admitted that if from improved technique the mortality of total extirpation could be shown to be not materially greater than that of supra-vaginal amputation, it must be considered the most surgically correct and hopeful procedure. No surgeon in his senses would remove part of a cancerous organ if he could remove the whole of it without much more danger. So far as recent statistics went the tendency seemed to show that total extirpation, unsatisfactory though it was, would come more and more into favour. It had been argued by Dr. John Williams and others that in epithelial cancer of the cervix the tendency of the disease was to spread laterally on to the vaginal walls and not upwards into the uterus, and that we might therefore safely rely on supra-vaginal amputation. This had always seemed to him (Dr. Playfair) a dangerous doctrine, and in the uterus [now shown] which he had removed by total extirpation the disease was apparently limited to the cervical portion so far as naked-eye appearances went. Yet in the section shown under the microscope, taken from near the fundus and right away from the apparently diseased textures, there were marked evidences of malignant infiltration. Similar specimens had been shown by Olshausen and others, so that the theory that "the epithelial variety of cancer can be safely considered to be limited to the cervix" seems untenable.—Dr. LEWERS said that a conclusion as to whether vaginal hysterectomy or supra-vaginal amputation of the cervix was the better operation could only be arrived at by comparing the results, both as to mortality and recurrence, obtained by these operations in a large number of cases. He did not think Dr. Cullingworth's cases were at all encouraging to those who were the advocates of vaginal hysterectomy; on the contrary, these cases made it evident there was an appreciable risk of intestinal obstruction as a remote consequence of the operation. Referring to his own patients, he had nineteen cases of supra-vaginal amputation without a death, and six of these were free from recurrence for two years and upwards after the operation. As regards the body of the uterus being involved in some cases, as mentioned by Dr. Playfair, the point was that generally when there was extension to the body of the uterus there was also infiltration of the tissue round the cervix, making these cases unsuitable for either operation. He thought that in exceptional cases vaginal hysterectomy was required for cancer of the cervix, and he had shown a specimen in point recently.—Dr. HEYWOOD SMITH considered that the result in Dr. Cullingworth's cases told more in favour of supra-vaginal amputation of the cervix, as two of the deaths were owing to obstruction due to adhesion of the bowel to the pelvic wound. He suggested the advisability of drawing down the wounded edges into the vagina so as to present a smooth surface on the peritoneal aspect. It seemed to him that, except in cases of primary cancer of the fundus uteri, the supra-vaginal amputation held out the better prospect of success at rather less risk to the patient.—Dr. GERVIS thought Dr. Playfair took too gloomy a view of the progress in cases of supra-vaginal amputation of the cervix, especially where the operation was undertaken for an epithelioma springing from the vaginal aspect of the cervix, or which, commencing in the cervical canal, had spread laterally rather than upwards.—Dr. WILLIAM DUNCAN pointed out that at the present moment there are no statistics showing the mortality in a large series of cases in which vaginal extirpation and supra-vaginal amputation for cancer had been respectively performed in this country, and that therefore we were not in a position to dogmatise on the subject. The best series of vaginal extirpations he knew of was that of Professor Sinclair of Manchester, whose mortality was certainly as small as that of supra-vaginal amputation when performed by the most skilful operators. He must confess to a change of opinion with regard to the two operations to that he expressed in a paper on Extirpation of the Uterus read before the Obstetrical Society in 1885, and he thought that now, as the mortality of the two operations can be reduced to almost (if not quite) the same level, total extirpation was the more scientific procedure, even though it were the more difficult to perform.—Dr. CULLINGWORTH, in reply, said he saw no reason to modify the opinion he expressed in the discussion on his hysterectomy paper as to the respective merits of supra-vaginal amputation and total extirpation. He thought Dr. Playfair's specimen a very striking illustration of the risk run

by those who practised the minor operation of leaving behind an unsuspected focus of cancer in the uterus. The fact of even the occasional occurrence of concomitant disease in the body of the uterus furnished a strong argument in favour of the removal of the whole organ even when the cervix alone appeared to be affected. Dr. Lewers' great success in the partial operation naturally made him strongly advocate it, but the number of those who agreed with him was steadily diminishing, and he (Dr. Cullingworth) had little doubt that total extirpation would come to be recognised as the more satisfactory method of dealing with the majority of those cases in which a radical operation of any kind was permissible. The meeting then adjourned.

PROVINCIAL MEDICAL SOCIETIES.

FORFARSHIRE MEDICAL ASSOCIATION.—A quarterly meeting of the Forfarshire Medical Association took place at the Anatomy Class-room, University College, Dundee, on Friday, Dec. 23rd, Dr. Rorie, President, in the chair.—Professor WAYMOUTH REID gave notes of a Case of Uro-hæmato-porphyrin-urea from Sulphonal Poisoning, of which the following is an abstract. Hæmato-porphyrin-urea is not uncommon in connexion with the administration of sulphonal. Stokvis, Jolles, Salkowski and Hammarsten have recorded such cases. In the case brought before the Society an elderly woman had taken large doses of sulphonal without medical advice and the urine presented the characteristic deep cherry-red colour. The pigment was unfortunately extracted by the lead method from the small sample obtained and presented the spectra of uro-hæmato-porphyrin as given by M'Munn in acid and alkaline solution and after treatment with zinc chloride and ammonia. No more could be obtained for extraction with Salkowski's barium method or Garrod's earthy phosphate method, since the case was rapidly fatal. The connexion between sulphonal and hæmato-porphyrin-urea is very obscure. A recent paper by Smith, working under Baumann, deals with the changes undergone by sulphonal in the organism. Kast had previously shown that its administration did not increase the output of sulphuric acid and that easily soluble organic sulphur compounds appeared in the urine. Smith, considering the possible excretory products—ethyl-sulphuric acid and sulpho-acetic acid—because he could not find the latter concluded in favour of the former; but the substance was not isolated. The fate of sulphonal, then, is as yet unknown. No direct action of sulphonal upon blood, aerated or otherwise, in the incubator at 40° C., could be obtained by the author, even when finely divided fresh liver or spleen was added to the mixture; indeed, no disintegrating action was to be expected from such a stable compound. Neither could any hæmato-porphyrin-like pigment be obtained by acting upon bilirubin in alkaline solution at 40° C. Two possible explanations of an indirect action of sulphonal occur to one: (1) On the assumption that hæmato-porphyrin is normally produced (traces in normal urine) but subsequently reduced in certain organs to a urobilin-like body (Nencki and Lieber), it is possible that interference with such organs might lead to the appearance of larger amounts of hæmato-porphyrin in urine. (2) Bilirabin being isomeric with hæmato-porphyrin, it is also possible that the constipating action of sulphonal might lead to an abnormal amount of absorption of the former from the bowel and that it might appear in the form of the latter in urine. In conclusion it may be mentioned that the action of sulphonal in producing hæmato-porphyrin-urea is subject to idiosyncrasy. A sample affecting one patient may leave another untouched, and it is not necessary that in the event of its producing abnormal pigment excretion that that pigment should appear as hæmato-porphyrin, as a recent case of Quincke's has shown.—Dr. MCGILLIVRAY exhibited and read notes of a case of Persistent Papillary Membrane with Congenital Dislocation of the Lenses and Corectopia in both Eyes. He also read notes of another case of Persistent Papillary Membrane in one Eye. In the first case there was a history of consanguinity; in the second case there was no consanguinity. Dr. McGillivray also showed a case of Synchisis Scintillans in one Eye in a woman aged seventy-two years. Ophthalmoscopic examination revealed no further changes in either eye except slight hypermetropic astigmatism. Her defective vision was caused by well-marked tobacco amblyopia. The patient seemed otherwise healthy.—A discussion ensued and the following specimens were exhibited amongst others:—A preparation of the Decidua at the close of the First Month of Pregnancy, exhibited by Professor PATERSON; Simple Ovarian Cysts, by Dr. MACEWAN; Casts of Deformities of the Extremities, by Dr. GREIG; and a Suppurating Multilocular Ovarian Tumour, by Dr. KYNOCH. The PRESIDENT also showed the result of a recent method of Hardening Brain Substance which had proved highly satisfactory.

GLASGOW SOUTHERN MEDICAL SOCIETY.—At a largely attended meeting of this Society, held on Thursday, Jan. 5th, David Couper, M.D., President, in the chair, a paper upon Diseases of the Conjunctiva was read by Dr. A. MAITLAND RAMSAY, who said that out of 5828 new patients admitted to Charlotte-street Eye Infirmary no fewer than 2550, or 43·7 per cent., were suffering from some conjunctival affection. After describing injuries, including burns from molten metal and from quicklime, and referring to the dermoid tumours, epithelioma and sarcoma, he spoke of the inflammatory affections of the conjunctiva. These were classified into the simple hyperæmic or dry catarrhs, the hyperæmic with discharge, the catarrhal and the purulent, the hyperæmic with plastic formation, the croupous and the diphtheritic. He then referred to the great class of strumous inflammations—phlyctenular, pustular &c.—and concluded with a description of follicular and granular conjunctivitis. The etiology, pathology and clinical appearances presented by each of the various types were described and the principles underlying their treatment were briefly discussed. The paper, which was illustrated by a large number of coloured lantern slides and by photo-micrographs of various pathological conditions, was warmly received by the members of the Society.

MIDLAND MEDICAL SOCIETY.—A meeting of this Society was held on Dec. 7th, 1892, Mr. Eales, President, in the chair.—Mr. HENTON WHITE showed for Dr. Foxwell a man aged sixty-five with severe Pressure Symptoms from an enlarged thyroid gland.—Dr. CHRISTOPHER MARTIN exhibited a Spleen removed from a case of leucocythæmia by Mr. Lawson Tait. Although the extreme risk of the operation was pointed out to her the patient decided to undergo it. Mr. Lawson Tait operated on Sept. 9th. The patient did not suffer in the least from shock and rallied well after the operation, but ultimately the stitch holes in the abdominal wall began to bleed and she slowly sank, dying four hours after the operation.—Mr. HASLAM showed a specimen of Kidney lacerated by violence.—Dr. SUCKLING then read a paper on Insomnia and its Treatment, and Mr. LUCAS another on Transfusion as a means of saving Life after Severe Hæmorrhage.

PLYMOUTH MEDICAL SOCIETY.—Saturday, Jan. 7th, was a clinical evening, Geo. Jackson, F.R.C.S. (past President), in the chair.—Mr. GEO. JACKSON showed a smith's hammerman, aged forty-three, from whose right vocal cord he had removed a papilloma with Schrotter's forceps eleven days previously. Hoarseness had been noticed for one year and seven months. Laryngoscopic examination now showed a wart on the left, nothing on the right, vocal cord. Laryngeal instruments were demonstrated and a microscopic preparation of tumour exhibited.—Mr. GOUGH produced a five-inch "bonnet pin" removed from the urethra of a man aged forty-three. The point was felt in the perineum, cut down upon, drawn out and the beaded end extracted by slightly enlarging the wound, which healed by first intention, a catheter being tied in for three days.—Mr. ROW exhibited (1) the Left Auricle of a dockyard labourer aged fifty-three, removed for epithelioma (?) of the antitragus following on frost bite two years and a half previously; the mastoid gland was somewhat enlarged; (2) a Vesical Calculus weighing one drachm and a half, phosphatic crust, blood and mucus nucleus, removed by supra-pubic cystotomy six weeks ago from a labourer aged forty-eight years, after relief of several urethral strictures by Wheelhouse's operation four months previously. There was a saccule behind an enlarged prostate.—Mr. THOMAS showed (1) half the Shaft of a Necrosed Fibula removed two months ago from a rickety girl aged five, and (2) Necrosed Femur from amputation of mid thigh for acute suppurative periostitis in a girl aged fifteen years, commencing eight weeks before. A huge abscess was opened five weeks before without relief. A small sequestrum was to be seen imbedded in the cancellous tissue of the lower end of the femur above the epiphysial line, and a large amount of new bone had formed at the periphery of the periosteal abscess.—Dr. LUCY exhibited a Parotid Tumour removed from a farmer aged twenty-four and of seven years' growth. A microscopic section of a Myxo-chondro-adenoma was then shown.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—At the meeting on Dec. 22nd, 1892, the President, Mr. Simeon Snell, F.R.C.S. Edin., in the chair, the following cases, notes and specimens were brought forward.—Dr. COCKING showed two cases of Ataxic Paraplegia: (1) a woman aged twenty-five, single; (2) a woman aged forty-six, single, a governess. In the latter case there was diplopia four years ago, which soon passed off and was followed by weakness of the legs and ataxy; her gait was unsteady, the unsteadiness increasing on turning and on closing the eyes; the pupils were equal, reacted sluggishly to light, and contracted slightly on accommodation; the discs were greyish; the knee-jerks had increased. The ataxy in both cases was unmistakable, but differed in character from that of locomotor ataxy. In neither case was there any evidence of intra-cranial disease nor of syphilis, or any history of injury or exposure. There was no neurotic family history.—Dr. PORTER read the notes and showed photographs of two cases of Progressive Muscular Atrophy. In one patient aged fifty the atrophy commenced in the muscles of the leg, thus resembling the "peroneal type" of this disease. There was an entire absence of family history and the disease had run a very acute course. In the other case the atrophy had begun in the muscles of the scapula and upper arm and there had been marked lordosis and wing-like projection of the scapula, resembling in several respects cases of simple idiopathic atrophy. In this case, again, there was no family history and the disease ran a very acute course, involving the forearms and hands in a typical manner. Death ensued ultimately from respiratory paralysis.—Dr. WILKINSON read short notes of a case of Acute Ulcerative Colitis in a man aged forty-three, who was admitted to hospital three weeks after the commencement of his illness and died three days after admission. The onset was acute, the principal symptoms being pain in the abdomen, diarrhœa with tenesmus, the passing of blood and mucus and rapid wasting. At the necropsy extensive and deep ulceration was found throughout the whole large intestine.—The PRESIDENT introduced patients with Herpes Frontalis, Embolism of the Central Artery of the Retina, Epicanthus &c. He also read notes of a peculiar and a rare case of Associated Movement of the Eyelid.—Dr. DAVY brought forward a child with a hard, painless Abdominal Tumour situated in the left part of the epigastrium.—Mr. RICHARD FAVELL showed an Ovarian Dermoid Tumour which he had removed from a woman who was three months and a half advanced in pregnancy. The patient made a good recovery and there was no attempt to abort.—At the conclusion of the meeting several specimens were shown.

Reviews and Notices of Books.

The Diseases of Children: Medical and Surgical. By HENRY ASHBY, M.D., F.R.C.P., and G. A. WRIGHT, M.B., F.R.C.S. Second Edition. London: Longmans, Green and Co. 1892.

THIS work has taken a recognised place in medical literature, and the appearance of a second edition shows that it is appreciated by the profession. It is one of the most thorough and complete manuals on diseases of children with which we are acquainted. The collaboration of a physician and a surgeon in the preparation of such a work is obviously a wise arrangement, and the wonder is that it has not become the rule. What would be thought of a physician or a surgeon who should propose to write a systematic treatise embracing the whole field of medicine and surgery as they relate to adults? Yet the difficulties of such a project are only a little less great in the case of children. The collaboration of Dr. Ashby and Mr. Wright saves this work from that sketchiness and scrappiness which are the bane of works upon diseases of children. The treatment of each subject is full and adequate, and no important disease is slurred over or merely outlined because it lies outside the range of the writer's practice. The present edition has been thoroughly revised, and several of the sections have been entirely re-written. Many clinical reports of interesting cases and forty new woodcuts, most of them original, have been added. The authors hope that their work may now be accepted as presenting as far as possible a complete account of Diseases of Childhood. In reviewing a second edition we do not feel it necessary to enter into details. We have tested this work at many points, and always with a satisfactory result. No doubt there are not a few statements and recommendations which we should be disposed to contest, but this must always be so in such a wide and debatable field as that of medicine and surgery. The style of the work is plain and unadorned; there is no striving after brilliancy nor any apeing of originality. The authors have evidently aimed exclusively at accuracy, simplicity and thoroughness, and we think they have succeeded. The woodcuts are numerous and well executed, but some of them are somewhat repulsive. The Horatian maxim, "Ne pueros coram populo Medea trucidet," is a good one for the stage, and we doubt if there is much advantage in multiplying ghastly representations of disease. Such aids to knowledge have their uses, but if employed too freely they seriously detract from the pleasure with which we contemplate the volume containing them. We can endorse the authors' claim that the information given is well up to date, and we have not noticed any important omissions. The therapeutic recommendations are for the most part plain and show common-sense. We can heartily recommend this volume as ably fulfilling its design, and we feel sure it will continue to occupy an honourable place in medical literature.

Finger Prints. By FRANCIS GALTON, F.R.S. London: Macmillan. 1892. Pp. 216.

MR. GALTON'S works are always good reading. They deal with subjects and problems the discussion of which is exceedingly interesting, and which, though they are, so to speak, at everyone's elbow, have never been thoroughly and carefully worked out. Mr. Galton's works on the Heredity of Genius, Natural Inheritance, and Human Faculty are examples of these investigations. In the present treatise he has taken up an apparently trivial subject, and by the number and accuracy of the observations he has made upon it has shown that it constitutes an exceedingly valuable means of identification of different persons even after the lapse of many years. If the palmar surface of the hand or the plantar surface of the foot be examined they are found to present a number of creases to the number and direction of which in the old days of cheiromancy great importance was attached, and also a number of minute parallel ridges which pursue curved courses, and, commencing in the hand just below the wrist, become very distinct over the thenar and hypothenar eminences, are less marked over the first and second phalanges and are most pronounced on the pulps of the last phalanges. Their number varies from forty to fifty or sixty to the inch and they represent the arrangement of the nervous and vascular papillæ which belong to the dermis. Mr. Galton states that in China—whose inhabitants are always the first people in curious knowledge—India and elsewhere the impression of the tip of the finger has been frequently used as a sign manual for documents of importance where the persons concerned were unable to read or write. The first person who employed them for this means with effect was Sir Wm. Herschell, who, when in Bengal, found it so difficult to obtain credence to the signatures of the natives that he thought he would use the signature of the hand itself, chiefly made with the intention of frightening the man who made it from afterwards denying his formal act. The impression, moreover, proved so good that Sir Wm. Herschel became convinced that the same method might be further utilised.

The use of the ridges does not seem to be clearly made out. Mr. Galton thinks they exist primarily to raise the mouths of

the ducts, so that their excretions may the more easily be got rid of, and secondarily in some obscure way to assist the sense of touch. We would suggest that in addition they give a certain degree of roughness to the surface which enables the fingers and hand to obtain a firmer grip and retain their hold of smooth objects, but they may also, as he observes, enable the character of surfaces to be perceived by the act of rubbing them with the fingers.

Mr. Galton devotes a chapter to the various modes in which a good impression of the ridges can be obtained. He describes with great minuteness the general course of the ridges, and shows how they may be divided into three main groups, which he names arches, loops and whorls, each of which presents many varieties, such as the plain arch, the tented arch, forked arch, and so on.

The persistence of these ridges is undoubtedly very great, and there are many points in the impression of each finger that can be directly and carefully compared, rendering it easy to establish the identity of the fingers making the impression after the lapse of years. Mr. Galton remarks that the dimensions of the limbs and body alter in the course of growth and decay; the colour, quantity and quality of the hair, the tint and quality of the skin, the number and set of the teeth, the expression of the features, the gestures, the handwriting, even the eye colour, change after many years. There seems to be no persistence in the visible parts of the body except in these minute and hitherto too much disregarded ridges. In this work the interested observer may learn the method of studying them.

Lay Down Your Arms: the Autobiography of Martha Von Tilling. By BERTHA VON SUTTNER. Authorised Translation by T. HOLMES. Revised by the Authoress. London: Longmans, Green and Co. 1892.

THIS work is an autobiography of the Countess Martha Althaus, whose father was a general in the Austrian army and a keen soldier, and her two husbands were also military officers. Her first husband loses his life on the battle-field, leaving her a widow at eighteen years of age with a son. Her second husband, Lieut.-Colonel Baron Tilling, is ordered off to the Schleswig-Holstein war, in which he takes part. Following this come rumours of the war with Prussia, which is finally declared, and he is again ordered off, together with Conrad Althaus, her sister's *fiancé*. The battle of Königgratz takes place, followed by the visitation of cholera at Grumitz, in which she loses her two sisters and brother, and her father dies of grief, and Conrad Althaus commits suicide on learning of the death of his future bride when he returns from the Austro-Prussian War. Baron Tilling relinquishes the service and proceeds with his wife to Paris, and is present at the siege, where, being suspected of *espionage* because a letter from Berlin is found in his possession, he is shot by the Communists. The elements of battle, murder, disease and sudden death may be consequently said to be always present and to afford opportunities for realistic and idealistic scenes. The object of the book, which is powerfully but somewhat too diffusely written, is to set forth the horrors and miseries of war and to show how terrible it is that wholesale slaughter should be the only way in which nations can settle their disputes. There is also a good deal of history and argument interspersed throughout the book. We are afraid, however, that it would be practically powerless if addressed to a nation like the French, for example, smarting under the loss of Alsace-Lorraine and willing to incur any risk in order to win back those provinces. There should be arbitration and a general disarmament, but how are they to be brought about? The terrible wholesale losses that will follow the use of modern arms in the next battle may possibly frighten any Power from going to war; or a great international society of working men may be formed in which the members bind themselves and their children not to enter any army. The unspeakable horrors of war are generally recognised, but how to bring about a general accord among nations that it shall cease—how is that to be accomplished?

Commercial Organic Analysis. By ALFRED H. ALLEN, F.I.C., F.C.S. Second Edition, Revised and Enlarged. Volume III., Part II. London: J. & A. Churchill. 1892.

CHEMISTS and especially analytical chemists have been eagerly awaiting the appearance of this volume which deals with the amines and ammonium bases, the hydrazines, the bases from coal tar and that important group of bodies, the alkaloids. It marks with singular prominence the great advances that have been made in analytical science during recent years. Ten years have elapsed since the publication of the last edition of that part of "Commercial Organic Analysis" which treated of alkaloids and tar bases. These subjects then occupied about 120 pages. In the present edition more than 570 pages have been devoted to only a part of the same subject matter, the sections on animal bases, cyanogen compounds, and proteids being reserved for separate issue in Part III. When Mr. Allen undertook the task of writing a complete work on the analyses of substances belonging to the organic section of chemical science, he could hardly have anticipated the enormous labour which such an undertaking must since have entailed. In spite of this he has practically completed his task; and with admirable tact he has dealt with those peculiar difficulties which beset the completion of a work extending, as this has done, over a period during which new analytical operations have been events of almost every day. How far the facts and materials are "up to date" may be gathered from page 520, where reference is made to the adulteration of Canton tea as recently as August, 1892. Nor are the articles in the work confined to the mere description of analytical processes. Recently acquired information of the most practical and valuable kind is to be found throughout the pages of the book, embracing facts, it is true, which have already been placed on record in current scientific journals, but which have never yet been embodied in the ordinary reference manuals of the analytical chemist. This is more particularly the case with those fine products which the investigating chemist has recently placed at the disposal of pharmacy and medicine. We refer to some well-known antipyretics, febrifuges, hypnotics &c. Thus an account of antipyrin and its properties occurs on page 32; of acetanilide, or antifebrin, on page 68; of phenacetin, on page 81; of pyridine, from which many alkaloids are derived, on page 99. Many well-defined tests as to the purity of these products are for the first time described. But by far the greater part of the volume is devoted to the alkaloids; and, apart from the excellent processes which are described for their separation and the means of recognising them by an admirable series of colour tests, their history, character and constitution will probably afford still more interesting reading. A reference to the synthetic production of two distinct basic substances isomeric with quinine is a case in point. A considerable portion of the section on nicotine is devoted to the chemistry of tobacco and tobacco-smoke. According to Vohl and Eulenberg the nicotine of tobacco (from 3 to 7 per cent.) is completely decomposed during the process of smoking, and the intense action of tobacco-smoke on the nervous system is probably due therefore to the presence of bases of the pyridine series. The smoke from tobacco varies in character, we read, according to the proportion of air admitted during combustion, oxidation being necessarily more perfect in the case of a cigar than when the tobacco is smoked in a pipe. In the latter case a portion of the condensible products is deposited in the liquid state. Tobacco smoke, it would appear, consists in part of permanent gases, the proportions of carbon dioxide and carbon mon-

oxide in which have been determined by G. Krause. Vohl found sulphuretted hydrogen and hydrocyanic acid and from 0·7 to 2·8 grammes of ammonia for 100 of tobacco smoked. This investigator, jointly with Eulenberg, experimented on the smoke of strong tobacco, burnt both in pipes and in the form of cigars. The smoke was first aspirated through a solution of caustic potash and then through dilute acid. The alkali absorbed carbon dioxide, sulphuretted hydrogen, hydrocyanic, formic, acetic, propionic, butyric and valeric acids, phenol and creasote. The acid absorbed ammonia, pyridine (C_5H_5N) and all the homologues of the series to viridine, $C_{12}H_{19}N$ inclusive. In addition to the above bodies carbon monoxide, methane, and several hydrocarbons of the acetylene series were detected. Pyridine was the chief base in the smoke from pipes, while collidine was the prominent base in cigar smoke. The admirable and comprehensive article on aconite bases occupies 44 pages; atropine and its allies claim 27, coca alkaloids 23, opium alkaloids 67, cinchona alkaloids 79, and tea and coffee 27 pages respectively. The sections devoted to the adulteration of tea, coffee and cocoa are as thorough as any we have seen.

Mr. Allen's important contribution is doubly valuable because to a large extent it is a record of his own practical and extensive experience in analytical methods and processes. Volume III., part II., is not one whit behind its predecessors either in the able manner in which the subject is treated or in the lucidity of style characteristic of the author. It goes without saying that professional chemists, toxicologists, analysts and others interested in this study will do wisely to exercise little delay in procuring a copy of this new volume.

LIBRARY TABLE.

The Hygiene of the Ear. By Professor COZZOLINO of Naples. Translated from the Fifth Italian edition by JAMES ERSKINE, M.A., M.B.Glas. London: Baillière, Tindall and Cox. 1892.—In this little work of four chapters are summarised very ably the principal points of importance in the hygiene of healthy and diseased ears. The first two chapters deal with infancy and childhood. Were parents and teachers fully aware of what is written in these pages we should hear less of "stupid" children and cases of neglected discharges from the ear. The prevalence of deafness amongst school children is one of the most important subjects dealt with in this part of the work. The last two chapters are conducted on the same lines. Thus the harm that accrues to the auditory apparatus from certain drugs, sea bathing and some occupations is fully demonstrated. We are glad also to see that the author condemns the improper use of "ear-drums" and other devices so much in vogue amongst the public of this country. The last chapter concludes with an appeal for the more early recognition and treatment of ear disease. While most of what is said in this little work may be found in any good treatise on aural surgery we are strongly inclined to recommend the study of the hygiene of the ear as here set forth to those who have charge of the young. The work may be read with advantage by medical men, by schoolmasters, and by those who have the control of large educational establishments.

Etudes de Clinique Chirurgicale: Année Scolaire 1890-1891. Par A. Le DENTU, Professeur de Clinique Chirurgicale à la Faculté de Médecine de Paris &c. Avec 36 figures dans le texte. Paris: G. Masson. 1892.—Professor Le Dentu states in his preface that it is his intention to follow up this volume with others, giving the results of his experience gained in the wards of the Hôpital Necker. From the character of the volume before us we hope this intention will be carried out. The first part contains a statistical account of the operations performed in this clinic for twelve months, which shows the results to have been very satisfactory and that the fruits of aseptic surgery are being reaped there. Then follows a series of twenty clinical lectures dealing with a great variety of topics, some commonplace, others rare and special. The lectures are clear and practical, and evince a high order of merit. The third part is devoted to reports of clinical cases, fifty-seven in all, observed in Professor Le Dentu's wards. They are grouped according to the tissue and parts implicated, and they are related with brevity and point. These cases are all of them noteworthy, and they are well and clearly described. The woodcuts accompanying them are in some instances poor, and ought to be improved in the subsequent volumes of the series.

Mediterranean Winter Resorts: a Practical Handbook to the Principal Health and Pleasure Resorts of the Mediterranean. By E. A. REYNOLDS BALL, F.R.G.S. Second Edition. Edward Stanford. 1892.—This is a useful and trustworthy handbook and will be found of great value to tourists and invalids. The author includes in his survey the resorts of the French and the Italian Riviera, Florence, Naples, Palermo, Catania, Malaga, Gibraltar, Corsica, Corfu, Malta, Tangier, Algiers, Cairo &c. The information given is fully up to date and remarkably accurate. The author does not write as a medical authority and always gives well-known authorities for climatological statements. These will be found in the main judicious and valuable. The information regarding routes, hotels, guide-books &c. is very full and correct. Within its limits this is one of the best books of the kind that has come under our notice. The only fault which we are inclined to find is with the illustrations, which are numerous and poorly executed. In future editions they should be either improved or omitted altogether.

The Queen's English up to Date. By ANGLOPHILE. London: The Literary Revision and Translation Office.—No doubt there is ample room for a book of the kind indicated by the above title, and any worthy attempt to maintain the purity of the English language, or to correct any departure from accuracy, is to be welcomed. It should be remembered, however (and this fact is suggested by a part of the title itself), that all living languages are subject to modifications, since new modes of thought and the advances of science necessitate new devices of exposition. Roughly speaking, the proper use of language is to convey exactly, in speech or in writing, the ideas it is desired to communicate to others. The law of evolution holds good in regard to language as it does for most other mundane things. Who, for example, would care to revert to the phraseology in which Chaucer couched his sublime imagery? With regard to the book under notice, whilst its object cannot but be commendable, the success with which it has been carried out may, to some minds, leave something to be desired. But who shall criticise the critics?

Recueil d'Ophthalmologie. 3e Série, 14e Année, No. 10.—This part contains a case of chromatic hemianopsia by M. Galezowski, in which the patient had lost his sense of colour at about a distance of 30° on the nasal side from the point of fixation. M. Chauvel discusses phlyctenular ophthalmia and prefers in its treatment the insufflation of calomel and hot boric acid compresses. Dr. Francis Dowling contributes a paper on the influence of tobacco on vision. M. Galezowski, speaking of the symptoms and treatment of acute inflammation of the lacrymal gland, states that he had only one case in the course of ten years, 1879-1889, whilst since the visitation of influenza he has had five cases.

The A B C Pocket Diary and Memorandum Book for Physicians and Pharmacists, 1893. London: Burroughs, Wellcome & Co.—We have received some copies of this extremely handy pocket diary, the present edition o which will be found to be slightly improved by the addition of a calendar, postal information and a cash

account. It shows one week on every page, has an alphabetical list for addresses, and a space for notes for 1894; notwithstanding this, its small and convenient size renders it absolutely unobtrusive in any pocket. Wallet cases suitable for holding the A B C Pocket Diary and Memorandum Book are provided at a small cost.

New Inventions.

AN IMPROVED LACRYMAL DIRECTOR AND PROBES.

ALTHOUGH I think it highly undesirable to add unnecessarily to the already heavy armamentarium the ophthalmic surgeon has to support I wish to call attention to a slight modification of some lacrymal instruments which I have found useful. I have experienced, and often seen others experience, some difficulty in accurately manipulating the director which is ordinarily sold as Bowman's, because it is too slender and does not offer sufficient bulk to be comfortably grasped by the fingers. I also have remarked that most of these instruments are too thick at the point to pass into many puncta, and have frequently found it necessary to enlarge the aperture before the director could be passed. To obviate these inconveniences I have had a handle constructed into which the proximal end of the director can be clamped whilst it is being manipulated, and I have had the distal end of it made to terminate in a small button like the end of a Weber's canaliculus knife. After the canaliculus has been slit up and the lacrymal sac opened the handle can be detached and fixed to any probe which it may be considered desirable to pass, much facilitating this process by giving a better grasp and enabling the instrument to be directed with greater accuracy—a point of importance when power has to be exerted. The probes are made of pewter and are of a consistence which admits of being readily, but not too readily, bent and moulded to suit the exigencies of each case. They vary in form both as to their thickness and extremities, and are so inexpensive that with out-patients they may be left *in situ* instead of the ordinary leaden styles now so much in use. The accompanying engraving well illustrates the modified instrument, which has been manufactured for me with excellent finish by Messrs. Wood and Co. of York.

C. S. JEAFFRESON, M.D. St. And., F.R.C.S.Edin.,
Senior Surgeon to the Northumberland, Durham and Newcastle Infirmary for Diseases of the Eye.

COMBINED THERMOMETER, PENCIL AND CHART TABLET.

MESSRS. SALT AND SON, Birmingham, have brought under our notice a very handy little registered case containing a thermometer and a pencil with a celluloid tablet on which to record

the temperature, thus saving the necessity of separate charts. The pencil is always at hand. The case is neat, compact and well finished in aluminium bronze and will be found useful to the medical practitioner.

"IMPROVED TOILET SPONGE AND TOILET GLOVE."

MESSRS. CRESSWELL BROTHERS AND SCHMITZ, Red Lion-square, London, have forwarded us two novel toilet accessories, named respectively the ablutonic loofah-backed sponge and the ablutonic toilet glove. The former is a combination of an ordinary sponge and a selected piece of loofah (Luffa Egyptica), and is made in a variety of sizes for bath and toilet uses. This arrangement renders the loofah much more handy for purposes of friction, and as it is placed over the root, the weakest part of the sponge, its durability is prolonged. The toilet glove is made of a very soft kind of Turkey sponge on one side and loofah on the other, both sides being securely and neatly fastened together. The sponge presents a fine surface, while the loofah can be used for rubbing the skin.

Pharmacology and Therapeutics.

ANTIPYRIN IN LEAD COLIC.

MM. Devic and Chatin have found antipyrin given in quantities of sixty grains daily in divided doses very serviceable in lead colic, both in its milder and in its more severe forms. They consider it far superior to other drugs, except belladonna.

ARTIFICIAL CAMPHOR.

A French chemist—M. de Mare—has devised a method of preparing camphor artificially. Camphene ($C_{10}H_{18}$) is prepared by distilling very dry hydrochlorate of terebinthine; the product is collected in a large globe and heated, ozonised air being then introduced so as to mingle with the vapour formed. This results in a cloud of camphor ($C_{10}H_{18}O$), which becomes deposited on the internal surface of the globe. It is expected that the method will prove a great commercial success.

POISONING BY EXALGINE DISPENSED INSTEAD OF QUININE.

A somewhat novel error on the part of a pharmacist is reported in the *Gaceta Medica Municipal* of Havana by Dr. Francisco Reynery. A boy two years of age, who was suffering from malarial fever, was ordered some quinine powders, one of which was to be taken every two hours. The powders dispensed, however, contained, as was afterwards discovered, five grains of exalgine. The first dose was stated to have been almost entirely vomited about half an hour after being taken; some prostration and two more attacks of vomiting followed. The second powder was given three hours after the first and produced such serious symptoms that the mother sent hastily for the practitioner in attendance informing him that the child had been poisoned. When he arrived an hour after the second powder had been given he found the child's face and hands of a dark-blue tint, which was still more marked in the nails, the scrotum and the penis; the right half of the lower lip and of the tongue was black, there was copious vomiting of mucus, and sweat standing on the head and the upper part of the body; the pulse could not be counted, the heart's sounds were confused, the epigastrium pulsated, and the veins of the neck were very marked, and indeed had been still more so, according to the mother's statement; the carotids were pulsating and swallowing movements were frequent; the epigastrium was tender upon pressure. The child had passed some dark-grey urine containing traces of albumen. The symptoms appearing to resemble those due to acetanilide the practitioner prescribed coffee and brandy, an enema containing ether, and a stimulating liniment to be rubbed over the whole body. On inquiry at the pharmacy the exact nature of the dispenser's error was discovered. Further examination showed that sensation in the lower limbs was diminished. After a few hours the discolouration had become decidedly less, the temperature, which had been a degree below normal, had become normal, the sweating was confined to the forehead, there was considerable thirst, but no more urine had been passed and there had been no more vomiting. The next day some dark urine was passed which contained a considerable amount of albumen; the colour was increased rather than diminished by heat and by the addition of an acid. The discolouration of the skin, the want of sensation and the other symptoms gradually disappeared and by the end of ten days the child was convalescent.

THE LANCET.

LONDON: SATURDAY, JANUARY 14, 1893.

ONE of the points to which the attention of the Home Secretary was especially invited by the important deputation on burial and sanitary reform which he received last week was the desirability of placing all matters relating to public health under the control of one Government Department having a Minister of Public Health as its head, and this was enforced by a quotation from a letter which Sir GEORGE BUCHANAN had addressed to Sir SPENCER WELLS to the following effect: "Pray get your colleagues to feel the idiocy of confiding to half a dozen separate Ministers the one dominant problem of securing health to the population of the United Kingdom."

The deputation urged upon the Home Secretary the grave risk to public health which is attendant on the existing methods of disposing of the dead both before and at the time of burial, and they could hardly have chosen a topic better serving than this to illustrate the evils of the present system of health government in this country. The Home Secretary has, it is true, a Burials Department in his office; but on the other hand the provision of cemeteries is now very largely a matter with which the Local Government Board are concerned. New cemeteries provided by local sanitary authorities are subject to inquiry by the latter department, who sanction loans for the purchase and preparation of the necessary land, and it is to the Local Government Board who have compiled model by-laws as to the management of cemeteries that the authorities making any such by-laws must go for sanction. The deputation also appealed for inquiry into the effect and influence of burial-grounds and cemeteries on health, and Mr. ASQUITH practically promised that such inquiry should be made by competent persons. Here again the Local Government Board have already in some measure intervened. Some few years ago a "Memorandum on the Sanitary Requirements of Cemeteries" was prepared in the Medical Department of that Board by Dr. FRANKLIN PARSONS, and is now regularly issued as an authoritative document by the department. A glance at it will show that the department must already be in possession of a large amount of material such as the Home Secretary is now asked to obtain, and a staff of competent inspectors are already available to continue the work in additional directions if need be. Then, again, when Mr. ASQUITH was asked to deal with the question of mortuaries he had to explain that Parliament had already vested compulsory and other powers as to mortuaries in the Local Government Board, and he might have added that that Board granted loans for their erection and had issued model regulations as to their construction and management. Lastly, the deputation appealed for proper certification of the causes of death. Here Mr. ASQUITH pointed out that he should have to consult the President of the Local Government Board. For any action which is needed in respect of certificates of death must be carried out by the Registrar-General, who is an official attached to that department, since amongst the matters which were transferred from the Secretary of State to the Local Government Board under the Act of 1871 was that of "Registration of Births, Deaths and Marriages." In short, the wonder is that the deputation went to the Home Secretary. The reason probably was that he being a Secretary of State, whilst the President of the Local Government Board has not that dignity, it was assumed that the comparatively trivial concern the Home Secretary had in the matters brought before him would be outweighed by his more dignified position in the Cabinet; and so long as the one subject of dealing with the dead is divided, however unequally, between two large departments of Government deputations desiring reform will doubtless select the Minister whose status gives him most influence.

The above-named considerations bring us to our next point. Sir GEORGE BUCHANAN had in general terms talked of half a dozen Ministers having to do with public health. Mr. ASQUITH stated that "the supervision of the public health, so far as the central government is concerned, is to all intents and purposes in the hands of two departments—I do not think more than two—this [the Home] Office and the Local Government Board." But Mr. ASQUITH is in error; the control of public health matters is much more divided than he supposes. Apart from the question of burials, the Home Office and the Local Government Board both have to deal with questions affecting the housing of the working classes. One office works under one set of statutory provisions and the other office under another set. The Local Government Board have an organised staff for their inquiries, the Home Office have to call in outside help when they hold an inquiry into the subject. Another matter affecting public health is that of factories and workshops. Here, again, matters are somewhat, though less, confused. Medical officers of health have certain functions appertaining to certain workshops, but the brunt of the administration is borne by the Home Office. Another example of our complicated system relates to quarantine. The Quarantine Act is administered by the Privy Council, who maintain a single quarantine station and staff. If a vessel with yellow fever on board happens to run into Southampton the Privy Council deal with it under the Quarantine Acts; if it runs into Swansea they leave it to the sanitary authority to perform their duty as regards this disease much as they would as regards any other infectious ailment. On the other hand, the Local Government Board will have nothing to do with quarantine; they exert themselves to prove its uselessness and the vexatiousness of its restrictions, and they will not listen to authorities who, panic-stricken about cholera, plead for the renewal of detentions which have now been abandoned for some forty years in so far as that disease and this country are concerned. We come next to the new Agricultural Department. They deal with a number of diseases which affect the lower animals, such as horses, cows, pigs &c., and which also affect the human subject. Anthrax, tuberculosis, trichinosis and the like come within their purview. But all their regulations are made under statutes which are only concerned with the spread of disease among the lower animals; they do not profess even to be able to act when the milk of the affected cows produces tubercle in the human subject, and until quite

recently, when a new order as to anthrax was issued, they did not even require their staff to inform the health officer of the existence in a given locality of a disease so fatal to man as anthrax. But the moment a man contracts one or other of these diseases—in fact, when the mischief which ought to be avoided has already been brought about—then the Local Government Board is appealed to, and our readers must have seen how almost hopeless has been the task of prevention in numberless outbreaks owing to the confused functions of the two departments. Well may the deputation appeal for unity in the administration of laws affecting the public health.

We do not here discuss in any detail the actual proposal as to a Ministry of Health. Mr. ASQUITH, asked to advocate unification of departments, only replied that he objected to their multiplication. Here politicians and administrators will agree with him. New departments start well, but their status is not always maintained. The first Minister of Agriculture was in the Cabinet, but the next one found no place there. A new Minister could hardly be accorded the status of a Secretary of State, whereas public health considerations are becoming so important that the Minister responsible for them ought to have such rank. For this reason alone it has been suggested as a better and a more feasible scheme that the Home Office, which is now but little more than a Ministry of Justice, should be made such in reality, and that the subordinate functions it performs as to burials and housing of the poor, as also those relating to factories and workshops, should be handed over to the Local Government Board as a Ministry of the Interior, and that the chief of this Department should be a Secretary of State. Quarantine functions would naturally be swept into the same net in order to be abolished, and some very necessary changes could be made as to dealing with the diseases of animals which have any bearing on the health of man. We do not profess to indicate now which is the better administrative method, but would advise our readers to consider carefully both schemes and to judge which would be most likely to lead to the desired end and which would stand the best chance of being carried into effect.

OUR contemporary the *Morning Post* has taken the trouble of tabulating all the cases of exceptionally long life recorded in its obituary columns during the past year and of giving such particulars as are available regarding the various centenarians included in the list. It is not to be expected that results drawn from an exceptional and limited field should possess any high scientific importance, but the facts recorded possess considerable interest and may suggest some reflections not without value. In dealing with such facts we are always beset with the difficulty of deciding whether some apparent conclusion is really a natural law or only an erroneous generalisation which would be corrected by a wider induction. Thus, when we find that the percentage of those who attained the age of eighty and upwards was only 6·7 in 1892 as compared with 16·6 in 1891, 12·6 in 1890, and 15·5 in 1889, it would be very rash to conclude that there was any general decline of longevity. No doubt, this low figure is an accidental fluctuation and requires to be read in the light of the averages of a long series of years. The octogenarians recorded in these tables numbered 1151, and it is found that of these 505 were males and 646 females. It appears, also, that at all ages above eighty, with perhaps a casual exception or two, the proportion of long-lived females exceeds that of long-lived males. Thus, 63 women died in their eighty-first year, as compared with 60 men; 75 women died in their eighty-third year, as compared with 63 men; 48 women died in their eighty-sixth year, as compared with 34 men; 26 women died in their ninety-first year, as compared with 17 men; 5 women exceeded the limit of 100 years, as compared with one man. A ratio so steadily maintained as this must possess some significance, even making every deduction for the limited nature of the data, and we are naturally inclined to seek for some explanation. We are disposed to find the explanation, not in any sexual peculiarity, but rather in the different circumstances which characterise the lives of elderly men and elderly women. While there are many exceptions, there can be no doubt that on the whole women lead easier lives than men. Their occupations, however harassing and engrossing, are still in the main much less laborious than those of men, and, in addition, women are as a class largely removed from many of the gravest perils which shorten the lives of men in various occupations. The army, the navy, the mercantile marine and a majority of the most noxious trades employ men only, and it may be said that there is hardly any single occupation of exceptional risk which is carried on exclusively by women. Sick-nursing, which might be thought to be an exception, is, on the whole, when properly organised, a healthy occupation, the regularity of life and habit, the knowledge possessed by the trained nurse and the high *morale* required of her more than compensating for the risks arising from frequent contact with infectious disease. Women, especially when they are advanced in years, are largely removed from conditions which imperil longevity in men. A woman over seventy who still works laboriously for her living is fortunately an exception, whereas most men, even when there is no absolute necessity, dislike the idea of retirement and inaction, and work on preferring to die in harness.

The influence of sex upon the duration and prospect of life is an interesting subject upon which we possess a good deal of information. As is well known, the proportion of male births definitely exceeds that of female births in the proportion of 30 or 40 per 1000. The mortality of males in early life exceeds that of females, while in middle life the perils incidental to child-bearing swell the rate of female mortality. In advanced years again, as we have seen, the expectation of life is decidedly somewhat better in the female. Dr. OGLE, in the life-table compiled from the mortality returns of the years 1871–80, shows that at birth the expectation of life is 41·35 years in the male as compared with 44·62 in the female. At each succeeding point the female average keeps steadily ahead. Thus, at five years of age a boy may hope for 50·87 years of life, while a girl may hope for 53·08; at the age of ten the respective prospects are 47·60 for the male and 49·76 for the female; at the age of twenty the figures are 39·40 and 41·66 respectively; at thirty they are 32·10 and 34·41; at fifty 18·93 and 20·68; at seventy 8·27 and 8·95. Curiously enough, at the age of ninety-five the male average

overtakes the female, both being 2·17 years, while at the age of 100 the female once more forges ahead, having a life prospect of 1·76 years as against 1·68 for the male. These figures can hardly be arbitrary or misleading and we may safely infer that the conclusion which they warrant is truly a natural law. As we have indicated, we are disposed to look for its explanation rather to the circumstances and modes of life of the two sexes than to any structural or sexual peculiarities.

The short histories of long-lived persons detailed by the *Morning Post*, while interesting from the point of view of biography and anecdotage, hardly warrant any scientific deductions. There are few subjects upon which more nonsense has been written than upon the means of attaining long life. The "elixir of life" delusion has had many parallels hardly less absurd. Centenarians are conscious that they are objects of general interest. They are not averse to being interviewed and they often attribute their own longevity to the most fantastic causes. A notable French centenarian not long ago ascribed his great age to the fact that he had never eaten fish. Others look for an explanation to their morning cold bath, or some trifling peculiarity of clothing or habit. It is useless to discuss such theories, which are outside the sphere of serious argument. Longevity is probably in the main a hereditary endowment, and next to heredity the most potent favouring causes are probably a regular, simple and well-ordered life, fresh air, plain food, temperance, and congenial occupation without drudgery.

There can be no doubt that the average duration of human life is rising steadily among civilised nations. Hygiene, medical science, the general spread of refining and moderating influences, education and the mitigation or removal of many of the plague spots of humanity share in effecting this change. Allowing for the fact that more than formerly we preserve ailing lives and prolong the duration of incurable diseases, it seems probable that, as men and women now live longer lives than formerly, they also live on the average healthier, more useful and happier lives than their forefathers.

THE meeting of Convocation of the University of London on Tuesday next will be of especial interest and importance. The members will then elect three persons and the one who has the largest number of votes will, in accordance with the usual custom, be selected by the Crown as a Fellow of the University. The existing vacancy on the Senate will, in the regular routine, be filled by a graduate in medicine or in science. Mr. A. W. BENNETT, Dr. W. J. COLLINS and Mr. H. G. HOWSE have been put forward as candidates, and it is apparent from a glance at the lists of their respective supporters that, while Mr. BENNETT will not probably be a very formidable opponent, the contest will be a very keen one between the other two. It will be decided on a very plain issue, for as both Dr. COLLINS and Mr. HOWSE have given evidence before the Gresham Commission, their views on the University question are well known. Dr. COLLINS advocates most strongly the necessity of maintaining the existing high standard of the degrees of the University, and is a keen supporter of the policy recently approved by the majority of Convocation—namely, of preserving every right and privilege now exercised by Convocation, including the right of veto; indeed he would still further increase its power. Mr. HOWSE is in sympathy with the movement for the formation of a Teaching University in London, and in May, 1891, voted for the scheme of the Senate, which would have admitted the Royal Colleges of Physicians and Surgeons to coöperation in the examination for medical degrees. In other words, whilst Dr. COLLINS would still allow the existing grievance of the London medical student, in not being able to obtain a degree on similar terms to those afforded students in the provinces and in Scotland to be perpetuated, Mr. HOWSE would favour some modification of the present examination system and teaching by which this injustice might be removed. Mr. HOWSE is supported by a large majority of the graduates in medicine—viz., 356 against 130 on Dr. COLLINS'S list, omitting those who have signed both nomination papers.

In addition to the election of a Senator Convocation will be asked to approve a new scheme for the reconstitution of the University which has been recently passed by the Annual Committee. A draft report which has been circulated with the agenda at once shows that Convocation by passing the new scheme will render all compromise with external bodies impossible. It states that there must be only one University in London and that the existing University must therefore add teaching to its present functions. The teaching institutions must not be federated but coördinated under one head, and the University is not to recognise institutions as a whole, but particular teachers or courses of instruction either in the teaching institutions or outside them. Convocation is to have a representation of twelve members in a Senate of forty, to retain its present powers, rights and privileges, and to appoint at least two members on each board of studies. A Faculty of Divinity in addition to the present Faculties is to be formed. The remedy suggested for the medical grievance is simple and only needs to be mentioned—viz., the other Universities should cease to confer the M.D. degree on such easy terms, or if such degrees must be granted, they should be conferred without the necessity of residence. We commend these views to the authorities of the Scotch and provincial Universities.

For the creation of a University professoriate and a staff of teachers and demonstrators the Senate is to have power to appoint members of the teaching staffs of the Colleges or other higher educational institutions as University professors, teachers and demonstrators, with endowments from the funds of the University (which are apparently expected to come from the City Corporation and the London County Council), on condition that the appointment to such chairs, whenever a vacancy occurs, should pass to the University. The Teaching Colleges and the Medical Schools are therefore expected to give up their autonomy, whilst certain of their lecturers and teachers are to be formed into a select class and to be labeled by the Senate of the University as University teachers in medicine, surgery &c., and in the various branches of arts and science; and these appointments are practically to be made irrespective of the governing bodies of the schools and colleges. Such a scheme shows a hardy belief in the capacity for greater developments on the part of a reformed Senate, in which Convocation will have increased power; but it is scarcely likely to be seriously considered by those who are now responsible for the efficiency and work of the Teaching Colleges and of the Medical Schools.

Annotations.

"Ne quid nimis."

ALLEGATIONS AGAINST HOSPITALS.

THE first two weeks of this year have been marked by the appearance of an unusual number of complaints against hospitals, and we feel compelled to again strongly record our protest against the manner in which they are brought forward and the undue prominence which is given to them. The art of magnifying trifles must be of great value to the newspaper man who has a sensation to work up. Moreover, it is always possible to strike at a hospital by bringing charges against it, for should the charges be false the hospital has no remedy. It is safe to hit those who cannot strike back. Newspapers should avoid saying anything likely to damage institutions which exist only for the benefit of the sick poor, but should rather use every effort to help and protect them. The Poplar Hospital for Accidents has recently been attacked and the ultimate result of the inquiry has been to clear the authorities of all blame. The termination of the inquest at which the charges were brought forward was marked by an unusual incident; the coroner himself gave five guineas to the funds of the hospital, thus marking in the most public manner his appreciation of the benefits conferred by the institution on the poor of the district in which it is situated. This hospital, dependent on voluntary contributions and located in a poor neighbourhood, cannot afford to have charges, however unsubstantiated, brought against it, for they result in loss of income and therefore loss of efficiency. The income is already inadequate, but the utmost possible is done with what is available, and there are few institutions more deserving of support. There are three things in connexion with hospitals that it is difficult to make the public understand—one of these is the fact that without funds the number of beds cannot be kept up, and some one must therefore occasionally be sent away because there is no room; another is that the management of the hospital must be left in the hands of those responsible for it, whose duty it clearly is to act for the good of the largest number; and the third is that the parish (and not the hospital) is responsible for the sick poor living in it. When the treatment required by any particular patient can be carried on equally well at home or elsewhere hospital authorities are quite right in sending away such a patient—provided it can be done without risk—in order to make way for another to whom the special care of the hospital may mean rescue from death. There has been some talk of the formation of a society for the protection of hospital patients; the person with whom the idea (what an idea!) originated would find plenty of employment for his surplus energy if he were to form a society for the protection of the institutions which exist simply for the benefit of the poor. Perhaps if the newspapers at fault in bringing forward these allegations were really compelled to apologise the apology would only be gracelessly rendered; as a memorable excuse for similar conduct was once given—"When you have to get up a sensation daily you must make a mistake sometimes." But even the best apology could seldom make amends for the harm done. "Save me from my friends!" may well be the cry of the poor man.

YEARLY RECORDS OF THE PROFESSION.

THE advent of a New Year is marked in the medical profession by the appearance of a new Medical Directory[1] and, more tardily of necessity, of the Medical Register for the year. It is a common custom with us to analyse the principal statistics of the profession and its growth as illustrated in the columns and tables of the Medical Register. This, indeed, is the authentic roll of the registered practitioners of this country and its dependencies and for this and other reasons is invaluable. But we must wait some months for this important book, and meantime we are fain to study the one which comes first to hand and which, indeed, makes a creditably prompt appearance in the first week of the year. It is noticeable that these separate and perfectly independent lists of practitioners do not altogether agree as to the numbers of the profession. Thus for the year 1892 the Directory gave as the numerical summary of the profession 30,035, while the Medical Register of the same year gave 29,555, being a difference of 480. There are other differences in the works which give to each its peculiar value. In the Register the whole profession is given in a continuous alphabetical list, while in the Directory it is divided very conveniently for the reader into a section for London, the Provinces, Scotland and Ireland respectively, for Practitioners Registered Abroad and for those in the Naval, Military and Indian medical services (excluding those which appear in other lists). There is a startling feature in the summary of practitioners for the year as given in the new Directory—viz., an increase in the numbers for the year of no less than 724. Thus in 1892 there were 30,035, in 1893 30,759. In Ireland the increase in the number of practitioners is only 5, from 2445 to 2450; in Scotland it is 124, from 2850 to 2974; in the provinces 377, from 14,026 to 14,403; in London 114, from 5293 to 5407. We shall wait anxiously for the Register to see how far it supports this representation of an addition in one year of 724 to an already overstocked profession. The publishers of the Medical Directory issue a circular yearly to every practitioner for the data of his description; failing a reply, they insert his name, but indicate that no return has been made by an asterisk, which denotes uncertainty as to the facts. These asterisks are in some pages pretty numerous, amounting sometimes to about 13 per cent. and sometimes to about 18 per cent., as we find by a cursory glance. Another source of possible error is the non-elimination of deceased members of the profession; but, after making all possible deductions, it must be admitted that there is an ominous growth in the numbers of the profession, out of proportion to the growth of the population or of its needs. But the figures respecting the numerical strength of the profession are only a small part of the interesting information with which this volume abounds and which makes it an indispensable element in the library of a medical man. It must be admitted that its description of a medical man and his status is more complete than could possibly be given in a Register which is restricted by Act of Parliament. Not only are a practitioner's qualifications given, but the schools at which he has studied, the appointments he holds, the societies with which he is connected and his contributions to the literature of the profession are noted. A very valuable feature of the Directory is the Local List which precedes the List of Names both in London and the provinces. It is interesting to notice that of the whole number of medical practitioners 5502 are engaged abroad or in the Naval, Military and Indian services. It would take too long to enumerate the various sections of the Directory devoted to abstracts of chief Medical Acts, the medical schools of the three divisions of the kingdom, the Sanitary Medical Service, the Local Government Medical Service, and the hospitals, dispensaries and lunatic asylums of the various counties. It is interesting to notice that the obituary list of the profession given in this volume, purporting to be the deaths from November, 1891 to 1892, amounts to 631 deaths. This number very closely corresponds with the numbers generally given in the Medical Register. The Registrar, it is known

[1] The Medical Directory, 1893. London, Provinces, Scotland, Ireland &c. 49th annual issue. London: J. & A. Churchill, 11, New Burlington-street.

takes advantage of all means for ascertaining the death of every medical man, and in the Register for 1892 gives 581 as the deaths for 1891. For the last sixteen years the average of deaths annually has been 570. For the last five years the average is 529. In four years only has the number exceeded 600. It speaks much for the care with which this information is gathered that it brings the list up to the highest possible figure. As our readers are aware the gaps made by death are always more than filled by the plentiful additions to the profession. In the year 1891 no less than 1345 were added. This does not diminish the pain with which many of the losses have to be recorded, but it relieves the national mind of the fear of any scarcity in the supply of healers.

THE SPREAD OF SMALL-POX.

TEN years have elapsed since the Royal Commission on Small-pox and Fever Hospitals reported that "it is evidently of paramount importance that the areas of the small-pox wards as well as their administration should be rigorously separated from those of the fever hospitals; and, further, that their construction should be such as to reduce within the smallest limits the chance of spreading infection." Since then we have repeatedly had instances of the spread of small-pox from buildings in which cases of that disease have been aggregated. When Warrington attempted it recently the patients professedly under isolation in other pavilions contracted small-pox, and now we learn that in Leicester the same thing has taken place. No less than fifteen scarlet fever patients contracted small-pox in a so-called isolation hospital and the scarlet fever wards had to be closed. The time has surely arrived for adopting some reasonable action as to the isolation of small-pox in the provinces, for the disease is still extending in many parts of England. Last week brings news of three fresh cases at Batley, three at Dewsbury, three at Bootle, five at Chadderton, seven at Oldham, seven at Barnsley, four at Rotherham, five at Huddersfield, four at York, six at Leicester, three at Southampton (the outbreak at which place is more fully dealt with elsewhere), twenty-one at Manchester, three at Wakefield, and there have also been smaller outbreaks at Bradford, Halifax, Birkenhead, Liverpool, Lancaster, Birmingham, Derby, Darlington, Swansea, Bakewell, Bedale, Durham, Castle-Bytham, Louth, Pontefract, Rúncorn and Denaby Main. Nine cases are now under treatment in the last-named place.

DECAYING HUMANITY IN OUR CHURCHES.

A letter appeared in *The Times* some days ago from Major Joseph, the churchwarden of St. Antholin's parish for upwards of twenty years. In it he describes his action as regards the bodies interred in the vaults of the church at the time of the removal of the building. He found upwards of six hundred coffins, nearly every one of which was in precisely the same state as those described as being in the churches of St. Mary Woolnoth and St. Mary-at-Hill. "I placed," he proceeds, "every coffin in a new outer shell; and instead of going to the expense of removing them to Ilford I enlarged the rector's vault at the end of the church and there deposited the coffins, making a register of such. The work was performed under the superintendence of the late Dr. Tidy and Dr. Sedgwick Saunders, under whose orders large quantities of carbolic acid were used and a small ration of rum was served every two hours to the workmen employed. We had no case of sickness and neither the public nor the friends of the deceased were in any way shocked. ..... I write this in the hope that you may be able to spare space for its insertion and that it may be useful to the churchwardens of the two before-named parishes and be the means of saving outlay to the parishioners." While giving every credit to Major Joseph for this economical mode of meeting a serious difficulty, we must express a preference for the entire removal of human remains from the heart of the City to some suburban cemetery. As a matter of fact, some such experiment as he made so successfully was tried in one of the churches to which he refers, with the result of making matters worse instead of better. Burial in the earth, not entombment, must be considered as the order of the day, subject to the searching inquiry which will probably soon have to be made into the whole matter.

APPOINTMENTS TO THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

SOME delay is being occasioned in the final selection of inspectors by which the Medical Department of the Local Government Board is to be reinforced in view of the increased duties which will be involved in consequence of the prospects of cholera during the current year. But we understand that three of the intended appointments have now been made for a period of one calendar year. The gentlemen thus appointed are Mr. Evan Evans, D.P.H., now assisting in the health department of Bethnal Green; Dr. Thomas Horne, formerly medical officer of health for Sandwich; and Dr. Hector M'Lean Wilson, assistant medical officer of health for Leeds.

UNQUALIFIED PRACTITIONERS IN HULL.

THE deputy coroner for Hull made some strong and proper observations a few days ago in commenting on the case of a child four years and a half old, which had been taken by its parents to the surgery of Dr. Haynes, but was attended by Mr. E. H. Knight without authority or qualification to practise medicine. He was not even an assistant to a qualified practitioner, but used that surgery two years and a half after Dr. Haynes had left it in such a way as to mislead the public. The deputy coroner made an important point in his remarks. We are apt to think that it is only by the false use of titles specified in the Medical Act that the public is misled, but the word "surgery" on a sign or a brass plate is as misleading as the word "surgeon"; and the coroner expressed himself greatly astonished that there should be in a populous street a gentleman who had a sign above his door which led persons to believe that the premises were tenanted and used as a surgery while they were occupied by a totally unqualified man.

IMPORTANT PROSECUTION UNDER THE MARGARINE ACT.

THE chief sanitary inspector of Wigan, who is also inspector under the Food and Drugs Adulteration Act, has been remarkably active since his appointment. Quite recently he was the means of bringing to justice a tradesman in that town for exposing margarine as butter; the magistrates convicted and fined the defendant £20 and costs. Now he has had a much more important case—a gross case of fraud on the public, poor and rich. A woman dressed as a respectable farmer's wife was accustomed to attend the Wigan market on the most important market day—namely, Friday—and beside her stall of cheese and eggs she had a basket containing what she sold as butter in "prints." He asked her what was in the basket and she said butter. He asked to see it and she picked it up and uncovered it, and it contained "prints" of one pound, this being a form in which butter is put up by farmers for sale. The inspector then wanted to buy some for analysis, and thereupon the defendant said the basket did not belong to her, and that a woman had left it with her that morning. She could give no information regarding this woman. The inspector took charge of the basket. Two pieces of this so-

called butter were submitted to Dr. Campbell Brown of Liverpool, and his certificate proved that one piece contained 10 per cent. of water and 90 per cent. of fats other than butter, and that the other contained 10 per cent. of water and 82 per cent. of fats foreign to butter. The town clerk, who prosecuted, described the case as one of the "very worst kind," the very nature of things leading the purchaser to believe that he was buying fresh butter. Mr. Roocroft, the presiding magistrate, said the Bench thought it was as bad a case as could possibly be brought before them. The defendant came apparently from the country to the market-place, where fresh produce was expected to be sold, and the unsuspecting public would naturally think she was a respectable farmer's wife and that the articles she was exposing for sale were of the purest possible character. The defendant was fined £5 and costs. After paying the fine the defendant claimed the basket and the "stuff" it contained.

INFLUENZA.

CASES of influenza are reported from various parts of the country. For example, in the West Riding of Yorkshire the county medical officer's return gives intimation of cases being notified to him from 31 sanitary districts (out of 160), which returns were received in the month of December. The summary of the past six months shows that in no month has it been entirely absent from the West Riding. A correspondent at Bedford writes that there have been "numerous cases of influenza in this town since the beginning of October. The type, on the whole, has been mild, so that the majority of cases have not been seen during the attack, but have come under observation for some complication or sequela. There have, however, been a few severe cases of pneumonia in children, evidently following a neglected attack of influenza." Similar testimony reaches us from Somersetshire, and cases are doubtless fairly distributed throughout the country. Nevertheless there is nothing at all approaching the visitation of the past years, nor is it likely to become so severe and extensive again for a generation. That influenza persists in some localities for long periods, or recurs at short intervals, is recognised by authorities, but its pandemic outbursts are relatively infrequent.

NEW YEAR'S CUSTOMS.

IN Lancashire, and probably in other counties in England, it is a general custom for tradespeople to give their customers Christmas and new year's "glasses," this custom extending even to letter carriers, policemen, carters and carriers in some villages. It is a most vicious custom and causes at times many unpleasant reminiscences. In towns the giving of drink to postmen and policemen is dying out, probably owing to the fact of the authorities discouraging it; with tradespeople and their customers it still exists. A most painful case of this sort occurred this year at Golborne, a village in Lancashire, near Newton-le-Willows. The subject of it became the cause of a coroner's inquiry. He was a single man nineteen years of age, living in lodgings and had only just arrived from Ireland. It appears that he was "keeping up" new year's day with some companions, and in the evening they adjourned to a well-known public-house, where a carousal took place. Other public-houses were visited, the landlords giving what is termed "the new year's glass." In all, it is said, this boy—he can scarcely be called anything else—had drunk up to half-past nine at night fifteen or sixteen glasses of rum. He then became so stupefied that he had to be carried to his lodgings in a helpless state. His condition getting worse, a medical practitioner was sent for, who used every effort to counteract the effects of the alcohol, but without effect, for the patient died at 2 A.M. on the next day. The verdict of the coroner's jury was to the effect that the deceased died from alcoholic poisoning, adding that they exonerated the landlord from blame. It certainly would have been better if medical evidence had been called at the inquest; in fact, a case of such importance should have been one for a post-mortem examination and medical opinion, for notwithstanding the alcoholic intoxication other causes of death may have existed.

SPURIOUS VACCINATION IN BELGIUM.

AT a recent meeting of the Belgian Medical Federation Dr. Wibo gave an account of a strange kind of vaccination in vogue amongst the inhabitants of certain villages. The child is "vaccinated" in the usual situation with a needle, which is charged by being previously inserted into one of the pustules which occur in pigeons in summer, which are vulgarly looked upon as small-pox pustules, but which are in reality produced by mosquito bites. Of course, this vaccination is absolutely useless as a prophylactic against small-pox, but it gives rise to cicatrices which at first sight may be readily mistaken for those of true vaccination. The false scars are, however, distinguishable from the true by being quite flat and not swollen or raised. They resemble, in fact, the scars following very superficial ulcers.

THE JOHNS HOPKINS UNIVERSITY (BALTIMORE) MEDICAL FACULTY.

THE full organisation of this school has been delayed owing to the lack of necessary funds, but recently Miss Mary Garrett of Baltimore has given $300,000, which makes up a sum of half a million dollars now in the hands of the trustees for the completion of the school. The biological, chemical and pathological departments have been organised for some years, under the charge of Professors Martin, Rensen and Welch. Three years ago, when the Johns Hopkins Hospital was opened, the medical, surgical and gynæcological departments were placed respectively in the hands of Professors Osler, Halsted and Kelly. The chairs of anatomy and pharmacology are not yet filled. The curriculum suggested in the preliminary announcement will consist of a three-years' science course (or its equivalent) and a four years' medical curriculum. The preliminary medical course of the Johns Hopkins University, which has already been a very popular one for medical students of the better class, consists, in the first year, of physics, chemistry, English, history and physical geography; in the second year, biology, chemistry and German; in the third year biology, French, psychology, logic and ethics. Students who have passed French or German as a principal subject in place of Greek for the matriculation must substitute some other subject, such as Latin or mathematics.

FOOT-AND-MOUTH DISEASE IN CATTLE.

THE sudden appearance of foot-and-mouth disease in a dairy at Barnsbury, North London, on Jan. 1st has been a startling surprise and has caused much alarm and wonder. Its introduction is even more mysterious than the invasion of last year, the source of which was never satisfactorily traced, though it was ascribed, but without reliable evidence, to imported cattle from Denmark. In the Barnsbury outbreak there is nothing whatever to fall back upon to account for its advent, none of the nine animals in the cowshed having been near any infected cattle or in any place where they could be contaminated for a much longer time than that of the period of incubation of the disease; consequently all kinds of surmises have been promulgated as to the origin of the malady, the most plausible of which perhaps is that the infection has been conveyed to them by some intermediate vehicle, such as litter or forage. But this is a mere suspicion, for which there is probably as little foundation as for any of the other hypotheses started to account for the unfortunate occurrence. As usual the spontaneous development theory has been

brought forward in response to the desire for information as to the outbreak, and an attempt has been made to prove that insanitary conditions will produce this and other infectious and contagious diseases of the domestic animals. This of course is a grave and dangerous notion, which should at once be dispelled. Everyday experience, as well as the entire history of these communicable disorders, demonstrates that they cannot develop spontaneously, and that their existence and extension depend upon their virulent properties. Once destroy the virus which generates them and they are seen no more. The evidence in support of this statement is absolutely overwhelming. No doubt insanitary conditions of dwellings and bad or improper food and management may predispose animals to the ready reception of the virulent agent; but without this these disorders will not appear. And it must not be forgotten that animals living in the open air, on wide plains, suffer from such diseases, and sometimes most severely. Just now foot-and-mouth disease is causing great apprehension because of its rapid advance in South Africa, where the immense herds and flocks are never housed; and in the same region, as well as in our Australian colonies, contagious pleuro-pneumonia of bovines has proved a veritable scourge among the roaming herds. By all means let the sanitary condition of animals in the United Kingdom be improved, but let us also stamp out the virulent principle of contagious diseases and prevent its introduction from countries beyond our sea boundary.

DIPHTHERIA, SCARLET FEVER AND MEASLES IN THE CHELMSFORD DISTRICT.

For the past three months an extensive epidemic of measles throughout the Chelmsford and Maldon Rural Sanitary Districts has prevailed, and a considerable number of schools have had to be closed for this reason. In certain parishes complications have arisen on account of the prevalence of diphtheria and scarlet fever also. In the village of Stock, during an epidemic of measles, a case of scarlet fever and diphtheria was introduced, and by the agency of the schools the latter diseases spread amongst the children. Unfortunately the scarlet fever was not at first recognised and children from infected families continued to attend school until they were closed on Nov. 1st. Since then about forty cases of diphtheria have occurred, in several instances complicated with scarlet fever and in others with measles, and there is reason to believe that in one or two cases the patients had all three diseases, for all three were prevalent in certain families at the same time. Dr. Thresh is about to issue a detailed report of this interesting outbreak. Fortunately only two deaths have resulted from diphtheria and one from scarlet fever (in Stock), and no fresh house has been attacked during the past month.

THE YERBURY-ROAD SCHOOLS.

THE magistrate of the Clerkenwell Police-court, Mr. Horace Smith, after hearing the evidence on both sides as to the drainage of these schools and having paid a visit to them for the purpose of personal inspection, has given an order for the changes and repairs required by the vestry of Islington. It is to be regretted that this order was necessary and that the board should have resisted the wishes of the vestry. It will be noticed that the vestry, through its officers, did not commit itself to any dogmatic assertion as to the connexion of the leaking and almost horizontally laid pipes with the causation, or even with the prevalence of diphtheria in the schools, and Mr. Smith wisely intimated from the first that he would not go into this question. He restricted himself to the question of the efficiency and soundness of the drains, and even on the admissions of the officers of the School Board only one conclusion was possible to a magistrate. It is perhaps impossible to prevent schools becoming the medium for circulating a great deal of disease, but this evil must be reduced to a minimum. Certainly coarse structural defects must be remedied and drainage must be above suspicion. While we regret the collision of the medical officers of the School Board and the vestry, we cannot regret that this battle has been fairly fought out in open court. It will tend to prevent such collisions in future, and it will perhaps also tend to enlighten the public as to the limited power of public bodies like the School Board to control building operations. The public seems inclined just now to impose on such bodies, made up for the most part of men busily engaged in private affairs, an indefinite amount of work. If this is not checked and the work of public bodies somewhat proportioned to the leisure and the ability of their members great public evils must result.

EFFECT OF CHLOROFORM ON LABOUR.

THE exact effect of chloroform inhalation on the contractions of the uterus during parturition has been recently experimentally investigated by Dr. Dönhoff in the Kiel Obstetric Clinic by means of an india-rubber bag passed into the uterus, communicating with a recording manometer, a kymograph and a mercurial manometer by means of a tube which, together with the india-rubber bag, was partially filled with water. He finds that a slight degree of chloroform narcosis has a paralysing effect on the uterine contractions, the pressure falling to nearly half what it was previously. If the chloroform is stopped the pressure during a pain increases, but at first to only about two-thirds of the original pressure. In two of the cases observed the initial pressure was not regained until two hours after the cessation of the administration of chloroform. In cases where the abdominal muscles assisted the uterine contractions to only a moderate extent this auxiliary was entirely arrested by chloroform even when the patient was only partially under its influence; but when the muscles exerted a great deal of force their action did not entirely cease unless the patient was fully narcotised. The intervals between the pains were prolonged by chloroform, so that when the patient was partially anæsthetised the number of pains in a given time was diminished by 20 or 25 per cent.

SURGEON-MAJOR KING, I.M.S.

MUCH indignation appears to exist in India at the treatment to which Surgeon-Major King has been subjected by being transferred from civil to military duty by an order of the Government of Madras to that effect, which has since been confirmed by the Government of India. It seems that Surgeon-Major King made certain experiments by which he was able to prove that small-pox virus obtained from the vesicles of a patient suffering from that disease produced cow-pox, attended with some constitutional symptoms and a rise in temperature, in healthy calves when inoculated therewith; and further that, by the aid of lanoline, vaccine lymph can be kept in a good and efficacious condition for months, whereas it has been found difficult in India to preserve the vaccine lymph under other methods. The scientific interest and practical value of these observations cannot be doubted, and most persons would consider their author entitled to great credit. As far as the results of Surgeon-Major King's experiments went to establish that small-pox virus in the human subject gave rise to cow-pox in calves, they have been since corroborated by experiments undertaken in this country by Dr. Hime. But it appears that, with full faith in the safety of the experiment, as the symptoms in the calf were absolutely characteristic, Surgeon-Major King forwarded some of the preserved vaccine lymph thus obtained to a medical officer at Anantapur for trial, and no harm resulted from this in any way as far

as we can gather. The Government of India, endorsing the action of the Government of Madras, holds, however, that his conduct in instituting and conducting his experiments and in disseminating lymph prepared from small-pox virus without the express permission of the Madras Government was irregular and indiscreet and might have had the result of provoking hostility to vaccination and perhaps to the Government under which he was serving. Surgeon-Major King was consequently deprived of his civil appointment and relegated to military duty at Mandalay. Allowing that this officer's action was technically, and in an official sense, wrong, still we think that the reasons given by the Government of India are far-fetched and exaggerate its importance. There is nothing to indicate that it was not the result of sheer inadvertence and professional zeal, for his demonstration that cow-pox is nothing but small-pox modified by having passed through the cow's body was an important one, which, as we have already said, was subsequently confirmed by Dr. Hime. Surgeon-Major King can appeal, no doubt, to the Secretary of State and get some persons of influence in this country to take up his case; but we trust that this will not be necessary and that the Government of India will recognise that they have already gone far enough and virtually cancel their decision in the matter by restoring this officer to civil employ.

THE EFFECTS OF THE CANAL BOAT ACTS.

IT is characteristic of modern legislation that it is becoming increasingly concerned with the settlement of social questions. The main principles of human conduct and the rights of property are no longer its only or even its chief objects, but many other matters of less immediate importance in the nation-making ages of the world have latterly provided it with worthy occupation. Such, for example, is that of which we have been reminded by the last annual report of Mr. Brydone, the chief inspector under the Canal Boat Acts for England and Wales. Notwithstanding the revelation of not a few discouraging facts, the pages of this report furnish abundant proof of the good work effectively done for health and education by the administration of these Acts. Cleanliness has increased, overcrowding, though still much too prevalent and, in the circumstances, by no means easy of cure, has undergone marked reduction, the work of education has made evident progress in spite of the difficulty interposed by a wandering life, and the spread of disease has been limited by the notification of infectious diseases. It is further satisfactory to note that these desirable objects have been attained with comparatively little friction of temper, thanks to the judicious conduct of the official inspectors. The mental and moral character of the barge population has improved in proportion to these beneficial changes in their vital conditions and we shall, on the whole, be fully justified in saying that experience has proved the practical value of measures in which the spirit of humanity has leavened with such good effect the hard legality of simple justice.

THE LEPROSY HOSPITAL NEAR DRONTHEIM.

A DESCRIPTION of a visit to the Leper Hospital near Drontheim in Norway formed the subject of a paper recently read to a Hesse medical society by Dr. Kunze. The disease, according to his view, is most probably connected with fish-eating, as it is most rife amongst the fisher-folk and the dwellers near the sea-coast in Spain, Russia, Norway and Sweden. The hospital is built on a high barren table-land about half an hour's drive from Drontheim. It is absolutely isolated, there being no habitations within sight. It is a long barrack-like two-storeyed building with two wings and a third building at right angles to the main part. It is kept spotlessly clean. The kitchens are underground. The male and female departments are of course separate The total number of patients is between two and three hundred, a great many of them being in the prime of life. Their general appearance is distressing, most of them being pale and thin, with sores or recently healed scars on their faces, which at first sight might be mistaken for the effects of lupus. In many cases the nose or lip is completely eroded, so as to expose the bone. In about 20 per cent. of the patients the eyes are affected and in from 40 to 60 per cent. the hands and forearms, many having lost one or more fingers.

SCIENTIFIC EXPEDITION TO SIAM.

DR. YERSIN, formerly an assistant in the Pasteur Institute in Paris, has been sent by the French Government on a scientific expedition to investigate the region between the Don-Nai and the Mekong as well as the table-lands in Siam between the Mekong and Bangkok.

ROYAL MEDICAL BENEVOLENT COLLEGE.

WE have pleasure in announcing that Sir James Paget has consented to fill the office of consulting surgeon to the Royal Medical Benevolent College in the place of the late Mr. Cock, who had been connected with the institution for so many years. The disinfection of the buildings after the epidemic of scarlet fever which was imported into the College last term is being carefully carried out with the advice and under the supervision of the medical officer of the College, the surveyor of the local board of health and the medical officer of health for the district. This is as it should be.

HÆMORRHAGES IN THE NEWBORN.

IN the *Centralblatt für Bakteriologie und Parasitenkranken*, xii., 17, 1892, Drs. Tavel and Quervain report two cases of hæmorrhages occurring in the new-born in which bacteriological investigations of the blood were made. In the first a purulent discharge from the umbilicus was noticed a few days after birth. Multiple and fairly extensive hæmorrhages occurred ten days afterwards. The infant died on the thirteenth day. At the necropsy, in addition to the features already noticed, blood-stained fluid was found in the pleural cavities; there was double pneumonia and hæmorrhages were also noted in the mucous membrane of the stomach and intestines and into the substance of the kidney. Examination of the blood and organs by means of cultivations showed large numbers of streptococci with a few staphylococci. In the second case pneumonia developed on the tenth day and death took place two days later. At the necropsy hæmorrhages were found in the pericardium, beneath the dura mater, in the pia mater and in the substance of the brain. On similar examination of the blood, staphylococci were found in large numbers. The hæmorrhages could not be ascribed to injury; the labours were perfectly natural, although in each case premature. In the first case the infection most probably took place by the umbilicus.

SMALL-POX AT SOUTHAMPTON.

SMALL-POX has, we regret to say, been again introduced into Southampton by shipping and, curiously enough, it is by the steamship *Tamar* again that the introduction has been effected. The disease appeared on board between Pernambuco and Lisbon, at which place two sailors were put ashore suffering from small-pox. About a week after arrival at Southampton one of the ship's stewards was notified to be suffering from small-pox. Owing to the fact of there being no available hospital accommodation (the house which does duty for an infectious hospital being filled with cases of another disease) he could not be isolated except at home. How this was carried out is shown by the result which followed—viz.,

that some dozen cases which have occurred since are all more or less traceable to the steward of the *Tamar*. Since then isolation in the present hospital has been insisted upon and a temporary iron hospital is being erected on the hospital site. Moreover, revaccination is being extensively practised at the instance of the town council and the guardians. We can only trust that these measures may prove effectual in limiting the progress of the epidemic. But it is to be feared that the unsuitable position of the hospital now in use, as well as that of the temporary adjunct, will but intensify the present danger to Southampton. In the interests of the town the council should lose no time in procuring a more suitable and permanent site.

"APOPLEXY OF THE PANCREAS" ATTRIBUTED TO SEA-SICKNESS.

DR. HADE describes a case of so-called apoplexy of the pancreas occurring in a female, in consequence apparently of prolonged and violent sea-sickness. The symptoms were analogous to those of peritonitis, there were severe pains on the right side of the abdomen and considerable distension with flatus. The patient died three days after being first seen. The kidneys were found to be granular and there was a large mass of extravasated blood, originating in the pancreatic artery, spreading over the whole of the pancreas and forcing its way to the two kidneys, which were enveloped in blood clot.

PROFESSIONAL TOUTING.

THE Pathological Society of Reading in Berkshire is believed to be the oldest society of the kind in the kingdom, having been founded in 1841. The medical men of the borough and counties adjacent who are members of this Society at their meeting on Jan. 4th determined to take some steps to check the growing tendency to lower professional status by the practice of circulating printed statements amongst the public, setting forth the conditions and terms on which they can be attended and supplied with medicines by becoming members of a "medical aid society." As the result of a full discussion the following resolutions were passed: 1. "That in the opinion of this Society the honour and interests of the medical profession are insufficiently safeguarded, and we do request the General Medical Council to use the powers vested in them, or if necessary to acquire larger powers, to enable them to deal with conduct (other than criminal) dishonouring to the medical profession." 2. "That this Society regards as unprofessional all touting, advertising or covering, or the holding of any appointment where it is shown that such means are employed to increase the sphere of work."

BURIAL AND CREMATION: A PROPOSED COMMISSION OF INQUIRY.

THE objects aimed at by the deputation of the Church of England Burial Reform Association which recently waited upon the Home Secretary were well worthy of the attention which they received. They included, as our readers will remember, besides the appointment of a Minister of Health—a matter referred to in our leading article on "The Ministry and Public Health" (*vide* p. 93)—a proposal for the more careful certification of causes of death and another for the institution of an exhaustive inquiry as to the comparative merits of the different methods of burial now recognised amongst us. We observe with much satisfaction that Mr. Asquith appears to be sanguine as to the feasibility of carrying into effect both of these latter propositions. There can be no question as to their importance. It cannot be denied that, notwithstanding the general practice and the recognised utility of death certification, there still remains a considerable annual margin of deficiency represented by cases in which the dead are allowed to reach their last resting-place without any official notice of the means, whether natural or other, by which they died. As regards the practice of burial in its relation to cremation and the relative advantage of different modes of interment, there is, in our opinion, hardly any sanitary question which requires more careful discussion or which as yet owes so little to the deliberate declarations of authority. We would most sincerely welcome the appointment of a commission of inquiry which would examine the present state of our knowledge upon this important subject, and would publish the result of its investigation in a definite statement of opinion.

THE LANCET RELIEF FUND.

THE "Application Form" of THE LANCET Relief Fund will be found in our present issue. It can easily be removed, filled up and forwarded to the Secretary, Mr. Edward Davies, THE LANCET Offices, 423, Strand, London. We would once more ask those of our readers who may have occasion to employ the form or to sign one of the required accompanying certificates to carefully notice the conditions on which applicants become entitled to a participation in the benefits of the Fund.

"FAITH CURES."

THIS subject has been recently discussed in the pages of one of our contemporaries by so able a physician as M. Charcot. His treatment of the subject is very calm and impartial. After showing that in all ages the conditions affecting the successful application of the faith cure have been practically identical, he emphasises the following important points: (1) That a special disposition on the part of the patient is necessary to success—a disposition fostered by the mental exaltation incidental to religious pilgrimages; (2) that the diseases usually benefited have been of a convulsive or paralytic order—that is, they belong to the category of functional disorders "which demand for their cure no intervention beyond the power which the mind has over the body"; and (3) that the domain of faith healing has thus a limited application. M. Charcot, however, deals with the matter in no dogmatic spirit nor does he restrict within too narrow limits the trophic influence of the nervous system. Mention is made of the remarkable case of a patient in whom a "hysterical œdema" of the breast resulted in extensive and long-continued sloughing and who was at the same time the subject of a profound hysterical paralysis of the left side. The sores, mistaken for cancer, rapidly healed and the paralytic symptoms disappeared.

ASLEEP OR DYING?

OF somewhat more than ordinary interest and importance was one of the cases recently inquired into by a coroner's jury at St. Helens. It was that of a woman who, probably while intoxicated, fell downstairs, and striking her head against a wringing machine sustained what finally proved to be fatal concussion of the brain. The most singular circumstance observed in connexion with the occurrence was the fact that the deceased was allowed to lie in a state of stupor for eighteen hours before her relatives considered it needful to send for medical assistance. It was the old story over again: the stupor of cerebral compression was mistaken for drunken sleep. Perhaps in the existing circumstances it was not remarkable that the other occupants of the house—her husband and son both over-tired with a week's labour and half asleep themselves—should at the outset have fallen into this error, notwithstanding the existence of a bleeding scalp wound. Dangerous head injuries, as every practitioner can testify, often wear at first and for some time afterwards an appearance of deceptive innocence. Their true character, unless it be carefully looked for at the time of infliction, is usually

revealed, only when too late for remedy, by the signs of serious brain mischief and this fact is of even more professional than general importance. It would not be surprising if death were in this instance accounted for by an excusable ignorance of the true significance of the head injuries. As it happened, however, the symptoms of grave illness were present and the absence of any real interest on the part of relatives was conspicuous. A verdict of accidental death was perhaps the only one possible, but the coroner did well to emphasise his opinion of the flagrant neglect which delayed till so late the arrival of skilled assistance.

SMALL-POX IN SCOTLAND.

SMALL-POX has shown renewed activity during the past week in Glasgow. A new centre of the disease was discovered on the south side of the Clyde and a number of the fresh cases are related to it. At Ardlin on Loch Lomond three or four cases have developed among persons who had been placed under observation owing to their having been exposed to infection from the case which we reported last week. The navvies' hut in which these cases occurred has been turned into a temporary hospital and an adjoining hut has been placed by the contractors at the disposal of the sanitary authority as a reception house. This week a case has occurred in a navvies' hut on the Helensburgh section of the West Highland Railway. In this instance the infection appears to have been brought by a tramp from Glasgow. Revaccination and isolation are being carried out in connexion with this case. The following table shows the movements of the death-rate of Old Glasgow since the commencement of registration in 1855:—

Mean death-rate	6 years	1855-60	29·9
,, ,,	10 ,,	1861-70	30·4
,, ,,	10 ,,	1871-80	28·6
,, ,,	10 ,,	1881-90	24·5
Death-rate for		1891	25·3
,, ,,		1892	23·6

The death-rate of Old Glasgow has only on two occasions—viz., in 1888 and 1891—been less than in 1892. The following is a summary of the year's work in the vaccination department:—

	1892.	1891.
Primary vaccination at station	869	850
Secondary vaccination at station	195	45
(At home)	1016	145

The Registrar-General estimates the population of the city for 1893 at 677,877, in place of 669,059—an increase of 8818. For the fortnight ending Saturday at midday, 18 cases of small-pox were reported. Two of these were reported in the first week of the fortnight, and 16 in the second, and these within the last few days of the second week. Reckoning from Wednesday, the 4th inst., till Wednesday, the 11th, 25 cases were reported.

THE "MANIA PELLAGROSA."

PELLAGRA in Italy is on the increase. True, it is not in itself a deadly disease. In 1888, for instance, the general mortality reached the figure of 829,431, while the victims who succumbed to pellagra were 3483. But it is a disease very disastrous in its sequelæ, one of which is a distinct mental neurosis manifesting itself in what has been classified as "mania pellagrosa." In Lombardy, the headquarters of pellagra, the *manicomii* (lunatic asylums), according to Professor Sormanni of Pavia, show a large proportion of the "pellagrose insane," those of Milan heading the list. In 1885 the Milanese *manicomii* admitted a total of 122 pellagrosi with 44 deaths; in 1886 a total of 147 with 45 deaths; and in 1887 a total of 105 with 46 deaths. Professor Sormanni demonstrates that while pellagra in general is on the increase, the mortality from it becomes more than proportionately heavy, and that the most numerous victims who succumb to it fell under that peculiar (and also increasing) form of it—"mania pellagrosa." To combat this deplorable phenomenon prevention rather than cure is the course indicated. But, meanwhile, in the Milanese provinces there has been erected an "Asilo de' Pellagrosi," where the treatment, mainly dietetic, is practised, from which the Legislature may be guided to the best means of averting the malady at its origin. That treatment consists in the substitution of a mixed farinaceous and meat diet for that exclusively meted out to the labourer—namely, the polenta (porridge) of meal made from unsound maize, which is his hereditary fare. Good broth, with milk, and a graduated allowance of wine, replacing the polenta above described, suffices to put the young pellagrose patient on the true alimentary tack, while in more confirmed cases—those in which neurosal lesion is already apparent—the same diet, coupled with a judicious use of alteratives and tonics, seldom fails to bring about physical and mental convalescence. At this stage the resumption of out-door or fieldwork comes in to complete the reclamation of the "pellagroso," and the leaves the "Asilo" a fitter man, capable of better work and thus enabled to give himself the more generous diet he has found to be necessary for body and mind. The "Asilo" which has thus afforded an object lesson to the individual and to the State in dealing with pellagra stands in the commune of Inzago and its success is stimulating the charitable throughout the Alta Italia to erect others with a similar object—chiefly in the Lombard and Venetian territories. Practical legislation on the part of the Government has yet to intervene for the improvement of the labourer's lot in that region—the more equitable incidence of taxation and the provision of public employment where private enterprise is insufficient. Works on an imperial scale, such as the replanting of the recklessly denuded hill-sides, the regulation of the affluents that feed the great rivers and the embanking of these latter—works imperatively called for to prevent the disastrous floods that annually devastate the Venetian province particularly—might profitably engage the services of those for whom there is barely employment enough in the fields. Professor Sormanni, meanwhile, can claim this result—of having demonstrated that prevention, not cure, is the proper way of dealing with this Italian scourge and that the appointment of commission after commission to "investigate" the phenomena is merely a political makeshift, to relieve the State of its obvious duty.

FOREIGN UNIVERSITY INTELLIGENCE.

Bologna.—Dr. P. Pellacani, Extraordinary Professor of Forensic Medicine, has been raised to the rank of Ordinary Professor.

Brussels.—An institute of Bacteriology is shortly to be erected by private munificence near to the Physiological Institute.

Leipsic.—Dr. Rudolf Armin Fick of Würzburg, a son of the great physiologist, has been appointed to an Extraordinary Professorship.

Messina.—Dr. Seimeni has been raised to the rank of Ordinary Professor of Ophthalmology.

DR. GUIDO BACCELLI delivered in Rome, on the 5th inst., the first of a series of lectures instituted by the Association for the Education and Instruction of Women. The Queen of Italy was present and the brilliant audience reflected the *élite* of Roman society. The lecturer chose as his theme the Vestal Virgins, and after a most interesting account of the excavation of the Atrium Vestæ effected, when he was Minister of Public Instruction, by the great archæologist, Signor Lanciani, he dwelt on the characteristics of the Vestals as illustrating the sovereign female virtue of purity, constancy, dignity and faith. The lecture, which was highly successful, will be made *publici juris*.

IN reference to the appointment of a Professor of Anatomy in the University College, Cardiff, the *South Wales Daily News* says: "In connexion with the new school of medicine to be founded next October at Cardiff, a rumour has unfortunately become prevalent that it is useless for outside men, however eminent, to send in an application for the professorship of anatomy, as it has been practically decided to give the appointment to a Welshman. On inquiring into the matter we learn that there is not only no foundation for the rumour, but that the College Council cannot possibly account for such a rumour being prevalent. Throughout the whole career of the College the Council has steadfastly kept one aim in view—viz., to appoint the candidate possessing the highest qualifications to the vacant post, and never on any occasion has this principle been set aside. This is one of the main reasons why the University College, Cardiff, has been so successful, and the same rule will unquestionably decide all the appointments for the new school of medicine."

THE programme for the series of lectures to be delivered at the Royal Institution in the spring of this year appears to be of more than usual interest. On the list will be found a series of ten lectures to be given by Professor Victor Horsley in January, February and March, on the "Structure and Functions of the Nervous System—The Brain," commencing on the 17th of the first-named month and terminating on March 21st. Also, on Feb. 10th, Professor Charles Stewart will discourse on "Some Associated Organisms," a subject which the lecturer may be trusted to deal with to the entire satisfaction of his audience.

THE recently appointed coroner for West Middlesex, Dr. W. B. Gordon Hogg, has chosen as his deputy Dr. William Wynn Westcott, who has acted for ten years past as Deputy-Coroner for Central London. The nomination has been officially approved by the Chairman of the County Council, as required by the Coroners' Deputies Act, 1892.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund, held on the 10th inst., T. Russel Pickthorn, Esq., Inspector-General, in the chair, the sum of £43 was distributed amongst the several applicants.

BARON HIRSCH has forwarded to the committee of the North-Eastern Hospital for Children a donation of £700; and to the Royal Hospital for Children and Women, Waterloo-bridge-road, a second donation of £700.

CHOLERA.

CURRENT NOTES, COMMENTS AND CRITICISM.

THERE is not much to record in regard to the progress of cholera during the past week, but what there is is significant in two directions—viz., that it is indicative of the wide-spread distribution of the epidemic and of the localised persistence of the disease at Hamburg as shown by the appearance of an occasional case of cholera there. We learn from Constantinople in the *Levant Herald* that between Dec. 25th and 26th last 2 cases of cholera and 6 deaths had occurred at Trebizond. A Commission met on Dec. 27th at the Ministry of the Interior under the presidency of His Excellency Refik Bey of the Home Office to discuss the sanitary measures which it is proposed to carry out in Trebizond with the view of arresting the progress of the disease in that district. In the village of Ketch 6 cases and 2 deaths were registered between Dec. 20th and 24th and one death is reported in the village of Badosh, in the province of Van. A few cases have continued to appear in Galicia; for example, since the 22nd ult. there were 12 cases and 5 deaths from cholera at Zalosze and three other districts in Galicia.

As regards Hamburg, after four days' immunity, a fresh case was reported on the 9th inst. in the person of a labourer living in the Steinstrasse and there was one death from cholera at Altona. On the 10th inst. it was reported that two of three sailors removed to hospital from a Spanish steamer, *Murciano*, had been found to be suffering from cholera and had died. Another case in the person of a man recently released from prison had also occurred. It appears that two Spanish steamers—the *Murciano* and *Zaria*—which had entered the port of Hamburg were found to be in an almost indescribably filthy condition, especially the former, which arrived from New Orleans on the 5th inst., but the affected men seem to have been attacked before the arrival of the vessel at Hamburg.

According to the *Times'* correspondent the probable source of infection in the cases from the *Murciano* was from the use of Elbe water. Be this as it may, the river has not stood for many years so low as it does at the present time; and it is pointed out that on the occasion of the cholera outbreak at Hamburg last summer the river was exceptionally low.

A fatal case of cholera occurred at Amsterdam on the 11th inst. and a fresh case of Asiatic cholera is also reported from the Hague.

The *American Journal of the Medical Sciences* for the present month contains three papers in connexion with the history of cholera in New York in 1892 and the results of the bacteriological examinations that had been carried out. The first vessel infected with cholera to arrive at New York was the *Moravia*, which left Hamburg on the 6th and arrived at New York on Aug. 31st, 1892. She reported 22 deaths during the voyage from gastro-intestinal disease. Three days after the arrival of the *Moravia* the *Normannia* and *Rugia* reached New York. The first person affected with cholera at New York was taken ill on Sept. 5th, five days after the disease had appeared in the harbour, and died on Sept. 7th. During the four weeks following 6 other cases occurred in that city, and 1 case in New Brunswick, N.J. Dr. Hermann M. Biggs, in his article on the late outbreak of epidemic cholera in New York, says that his experience in 1892 and previously at the quarantine station in 1887 convinced him of the great practical value of bacteriological examinations in the diagnosis of Asiatic cholera, and of their importance in assisting the work of the Health Department. Reviewing the history of the outbreak in New York, he summarises his conclusions as follows: "In no single instance, after the most careful and conscientious inquiry and investigation, was it possible to find any satisfactory way of accounting for the infection. The cases occurred in widely separated parts of the city, and in no instance was there the slightest suspicion of association. After the cases were brought to the attention of the Health Department, in no instance did a secondary case occur. There was a striking association in the occupation of the persons affected with the food trades, and especially animal foods. Although some 26 suspicious cases were examined, in every one in which the cholera spirillum was found, 8 in number, death occurred, while in only one of the other cases in which the cholera spirillum was not found did death follow. In two instances, however, where recovery took place—that is, the fifth and sixth cases—although biological examinations were not made, the associations with cases which were proven to be cholera Asiatica justified the assumption that these were of the same nature." The *Indian Medical Gazette* for last month has, on the other hand, a very important article bearing upon the pathology and bacteriology of cholera, based upon the reports of Surgeon-Lieut.-Colonel D. D. Cunningham, F.R.S., and other officials in connection with the recent tragical outbreak on board the *Crofton Hall*. We may succinctly recapitulate the facts regarding this occurrence as set forth by our Indian contemporary. The ship *Crofton Hall* was lying in the Hooghly on Jan. 20th, 1892, at which date her second officer prepared some fresh brine with water taken from the river, for the preservation of some beef received on board at New York. The vessel remained in the river until June 2nd following, during which time the beef remained for some of the hottest time of the year in what is called a "harness cask," the crew being rationed from the shore. The salted beef was issued on June 4th, 5th, 7th, 9th and 12th respectively, after the vessel had left the port of Calcutta; and the issues were followed on each of the following days by symptoms resembling cholera among thosewho partook of the meat. Twenty-three out of

a crew of twenty-nine were attacked, and 6 cases died among 14 of those seized during the first four days of the outbreak. It is important to note that no sickness occurred on those dates when the salt beef in question was not issued. The ship returned to Calcutta owing to this sickness among her crew, and ten of the remaining sick were at once sent to the General Hospital for treatment. The medical officers of that institution were unanimously of opinion, however, that these ten men were not suffering from cholera. The absence of depression of temperature and suppression of urine, the presence of pustular eruptions or abscesses in a large proportion of the cases and other phenomena, together with the fact that all ultimately recovered, whereas the death-rate of cholera among Europeans ranges from 50 to 75 per cent. in that climate, left no doubt on the minds of the medical staff that the disease was not true cholera. An exhaustive investigation was also undertaken by the health officers of the port and town of Calcutta which proved in the clearest manner and beyond any doubt that the outbreak was due to the issue of the meat from the harness cask. Unfortunately the remains of the suspected meat were thrown overboard, but specimens of the brine in which the meat had been soaked were taken away and carefully examined by different officials and by Dr. D. D. Cunningham, who also examined bacteriologically the excreta from the patients admitted into the Calcutta Hospital and the micro-organisms found in the stools. The papers connected with this inquiry, and the Government resolution thereon, were published in the *Calcutta Gazette* of Sept. 30th, 1892, and, according to our contemporary, form a very clear and complete history of the occurrence. The cause of the disease was naturally attributed to poisoning from some ptomaine developed in the partially decomposed salt meat, of which the men had partaken.

The brine had a peculiar fetid odour and acid reaction and was crowded with bacilli of different kinds, but, as might have been expected, there were no comma bacilli present. Dr. Cunningham's examination of the stools of the patients showed, however, that in one of the cases the flocculi were occupied by very abundant and almost pure growths of well-formed comma bacilli, and both plate and tube cultivation, especially the latter, gave comma bacilli in abundance. When cultivated in ordinary gelatine and in agar-agar these comma bacilli liquefied the gelatine and behaved exactly in the same manner as organisms of the same shape are found to do when associated with true cholera, producing also after forty-eight hours cholera purple with nitric and sulphuric acids. It may be mentioned, moreover, that cats fed with the cultivations obtained by Drs. Ranking and Simpson from the micro-organisms of the brine gave rise to diarrhœa and in one case to vomiting in those animals. The *Indian Medical Gazette* summarises the salient points as follows:—An epidemic clearly produced by the consumption of partially decomposed salt meat, giving rise to symptoms clinically distinguishable from those of true cholera; and micro-organisms, consisting chiefly of straight bacilli, and yet comma bacilli, differing in no essential from those discovered in true cholera, were found in abundance in the stools of one of the men admitted into hospital. The importance of the observation consists of course in the fact that it is opposed to the current belief that true cholera can be absolutely diagnosed by the presence of these bodies in the stools. Our contemporary rightly regards these observations as of great interest at the present time, and adds that it is not at all uncommon to find an abundance of morphological comma bacilli in the intestinal discharges in cases of diarrhœa, a very striking example of which, it states, presented itself last year in a case of artificially induced diarrhœa in the person of a prisoner in the presidency gaol. What renders the present instance remarkable is that the comma bacilli are cultivatable under the conditions favourable to the growth of those associated with true cholera and present features showing that they belong to the same group of organisms as the latter. After a logical analysis of the views specially advocated by Professor Friedrich of Berlin and others and of the difficulties involved in the belief that all the very distinct forms of comma bacilli found by Dr. Cunningham and others are to be regarded as "atypic varieties" of one and the same organism, our contemporary leads up to the conclusion that the association of comma bacilli with cholera can no longer be regarded as peculiar and specific. If we remember aright, Professor Koch originally described his specific organism, when discovered in cholera cases in Egypt, as a straight bacillus resembling one which had been found in glanders, and it was not until after the German Commission had proceeded to India that, in 1883 and the early part of 1884, it was described as curved, or comma shaped, and not straight.

HEALTH OF THE ITALIAN ARMY.

THE War Office of Italy has just issued its medico-statistical report on the sanitary condition of the Italian Army during 1891—the last statistical year. It is compiled from the returns of the "Ispettorato di Sanità Militare" and its editor and commentator is the medical inspector, Colonel Santanera, M.D.

A sensible increase in maladies and in mortality during 1891 is the unsatisfactory conclusion of the report of that year as compared with those of its predecessors.

The causes of this increase are sought in the fact that in 1891 there were called under arms two classes of conscripts—"it being known that it is precisely in the early months of service that levies most easily take ill and that their maladies most often run a fatal course."

The insanitary results of 1891 are the gravest of those within the last quadrennium. In 1887 there were per 1000 men of the mean force 760 admissions into hospital and 8·7 deaths; in 1888, under the same heads, the numbers were respectively 732 and 8·7; in 1889 they were 749 and 8·0; in 1890, 796 and 7·5; and in 1891 as many as 811 and 9·0. The individuals admitted into the infirmaries of the several army corps in 1891 were 89,977. Of these, 14,671 passed from infirmary to hospital in continuation of their cure. In the military hospitals and in the garrison and special infirmaries (*infermerie presidiarie e speciali*) there were admitted 88,085 patients—that is, 87,116 directly and 969 from other hospitals.

The mortality among officers was always, and in high proportions, greater than that among common soldiers, while it was invariably lower among individuals not belonging to the combatant arm. On this subject Dr. Santanera says:—

"The deaths of officers admitted into hospital are uniformly in excess of those of the other categories of admissions, for the reason that in general the officer enters hospital only for grave illness. The mortality amongst non-combatants (sentries on guard at the Ministry of Finance or at Government banks, at municipal halls and at prisons, and exceptionally the military marine) is always lower than amongst combatant troops, chiefly because their off-duty hours are much more numerous than in the army, while their age is generally superior to that of the regulars, among whom ailments and mortality are most frequent amongst the youngest."

The regiments and the corps that in 1891 yielded the largest contingent of patients were the grenadiers; next came the field artillery, next the infantry of the line, then the cavalry, then the engineers. The smallest number on the sick-list was found among the Royal carabineers.

In 1891, moreover, as in the previous statistical years, the health of the army was at its worst in the winter months. Ailments reached their highest figure in February, deaths were most frequent in March.

The maximum of unhealthiness (1046 per 1000) was attained in the Perugia division, the minimum (621 per 1000) in that of Turin. The maximum of mortality (14·3 per 1000) was found in the division of Bologna, the minimum (6·3 per 1000) in that of Alessandria. Finally, the maximum of those put on sick leave (27·7 per 1000) is shown by the Bologna division and the minimum (5·7 per 1000) by that of Ravenna.

Within the last quinquennium the mean of mortality was always exceeded by the divisions of Padua, of Rome, of Perugia, of Naples and of Bari. The mean of those put on sick leave was exceeded, as in the four years preceding, by the divisions of Brescia, Bologna, Florence and Perugia. The mortality, on the other hand, which up to 1890 was always above the average in the divisions of Genoa and Naples, was in 1891 somewhat, though not much, lower in these latter.

The maladies which numbered more than 1000 patients each were the following, the highest being given first:—Venereal diseases, 15,809; acute bronchitis, 10,056; rheumatic fever, 5365; malaria, 4232; acute gastric catarrh,

3465; pleuritis, 2947; simple quinsy, 2745; and rheumatoid arthritis, 2517.

The aggregate number of deaths among the troops in 1891 was 1978, or 9 per 1000 of the mean force; the officers of the standing army who died were 124. Deaths by infective disease underwent some increase; on the other hand there was a diminution in tuberculous cases and suicides. The proportion of these was 0·33 per 1000.

The garrisons on the Red Sea littoral gave an average of 11·75 sick per 1000 of the force, which, excluding the indigenous soldiery, had a mean of 2603 men, with a maximum of 36·48 in March and 17·96 in number during October.

To the admissions into infirmaries and hospitals during 1891, adding 157 remaining over from December, 1890, there is, for the garrisons of the Red Sea littoral, a total of 3215 under treatment, of whom 1439 were hospital and 1776 infirmary patients.

The losses by death during 1891 were, on that littoral, 36 in all—that is, one officer and 35 men.

The average of the mortality of the troops was hence in the aggregate 19·4 per 1000 of the force, while with restricted reference to the sick under treatment in hospital and infirmary the mortality itself is reduced to 9·7 per 1000—that is, 9·5 in hospital and 9·9 in infirmary.

Comparing the figures above given with the corresponding ones of the year before, it is seen that in 1891 the sanitary condition of the troops on the Red Sea littoral was somewhat improved, if not on the side of disease, at least on that of death.

To aggravate the death-rate in 1891 the cholera made its special contribution. From this epidemic, though much restricted and of very brief duration, there died six. Deducting these, the mortality of the troops remains 11·1 per 1000 of the force.

The greatest amount of disease was in November, a fact attributable to the exceptional development of malaria in some garrisons and of rheumatic fever in others, due to the inclemency of the season.

Dr. Santanera's report contains other matter of much sanitary interest, civil as well as military. But the statistics above given exhaust the details bearing particularly on the health of the Italian army.

A CENTRAL OPHTHALMIC SCHOOL FOR LONDON.

BY SYDNEY STEPHENSON, M.B., F.R.C.S. EDIN.,
SURGEON TO THE HANWELL OPHTHALMIC SCHOOL.

THE proposal to isolate cases of ophthalmia, in an institution where treatment might be carried out together with schooling, was advanced twenty-four years ago by the late Mr. Critchett. It has been urged since then by Dr. Bridges and by Mr. Nettleship and also by Mr. H. J. Searle, chairman of the Central London School District. A practical attempt at dealing with epidemic ophthalmia was made in 1886 at the Norwood Schools, which belong to the parish of Lambeth. The guardians engaged my services and placed at my disposal a modern building and a good staff of nurses. After two years I was able to say that the attendance of an ophthalmologist was no longer required. As regards other parochial schools it is not going too far to say that ophthalmia has more than once given grave cause for anxiety in every one of them. This has been specially the case at the Strand and the Forest Gate Schools, where steps have been taken involving the expenditure of considerable sums of money. Furthermore, it is practically certain that under present conditions they will never be safe from future outbreaks. Indeed, the necessity for dealing with the disease in a radical manner must by this time be obvious to most people, and it appears to me that the present is a particularly opportune moment for urging the claims of a central ophthalmic school. An ophthalmic school was erected two years and a half ago at Hanwell to receive 400 children, but for some time past it has contained less than 100 patients. This waste of accommodation led me in July last to suggest in my report to the managers that they should throw open their institution to other metropolitan unions. Shortly afterwards the Local Government Board made a similar suggestion, which the Hanwell managers, however, profess themselves unable to adopt. At the same time they are willing to dispose of the buildings to any properly constituted authority, but, so far, no answer has been received from the Local Government Board to the latter proposition.[1] From a report published by Dr. Bridges in 1890 one learns the significant fact that during the previous seven years not a single parochial school remained wholly free from ophthalmia. Tables appended to that report show the number of children invalided by the disease on fourteen specified dates between the years 1883 and 1889 inclusive, and a calculation of some interest may be readily made from the data thus supplied. To obtain the following figures I have taken the average number of children and the average number of ophthalmic cases for the seven years covered by the report, and from these have calculated the average percentage of ophthalmia for each school. The results arrived at are suggestive. Hanwell heads the list with an average of 16 per cent.; Norwood comes next with 9 per cent.; Edmonton and Sutton, 5 per cent.; Banstead-road, Leavesden, and Brentwood, 3 per cent.; Anerley and Harold Court, 2 per cent.; Ashford, Forest Gate, Leytonstone, Southall and Mile-end, 1 per cent.; and lastly, remaining institutions showing less than 1 per cent. of ophthalmia. It is interesting to observe that on the last date given by Dr. Bridges (July 6th, 1889) no less than 598 cases of ophthalmia were under treatment in the various schools. During the last two years the City of London and the parish of St. Saviour's have sent to the Hanwell Ophthalmic School 128 affected children, only 28 of whom had previously been inmates of a pauper school. Again, a considerable number of children suffering from ophthalmia are at this moment detained in the Lambeth workhouse and infirmary because the medical officer at Norwood very properly refuses to admit such cases into the school. These facts show that among the fresh admissions to the London workhouses are a number of children who have already contracted the disease outside. "Granular lids," as most people know, drags its tedious course over a number of years, so that cases must accumulate in the infirmaries. On the other hand, to send affected children to schools that have not proper accommodation would be to court disastrous outbreaks of ophthalmia. A central ophthalmic school would receive not only existing cases of ophthalmia from the various schools, but also all children thus affected on admission to the workhouses. The metropolis has upwards of 11,000 pauper children distributed amongst eighteen schools belonging to different unions. Each school has therefore to deal with its ophthalmic cases as best it can. Complete isolation is now admitted to be essential for the prevention of ophthalmia, but it is clear that in most schools such isolation is at present impossible. When an outbreak occurs the infirmary becomes quickly filled and the children overflow into the school itself. It is possible that some at least of the widespread outbreaks recently witnessed would never have taken place had a system of rigid isolation been consistently in force. Should a school determine to grapple efficiently with ophthalmia the attendant expenses will necessarily be heavy. At Hanwell, for instance, upwards of £30,000 has been spent on the erection of a suitable isolation school, while at least £4000 have been expended on salaries already. The direct and indirect expenses of the recent outbreaks at Norwood, Forest Gate and Edmonton must have been proportionately heavy. The certainty of incurring pecuniary burdens of this sort is scarcely calculated to encourage action on the part of boards of guardians; yet it is obviously to the interest of the community that such steps should be taken. Individual boards, however, would feel no hesitation in sending affected children to a central institution to which each union contributed. Regarded from an economic standpoint a central school would be more efficient and less costly than would be possible in any scheme initiated by a single union.

Turning now to the educational aspect of the proposed scheme it can hardly be questioned that teaching would be better carried out in a well-equipped central school than could possibly be the case in scattered buildings set apart haphazard for diseased children. At Hanwell the majority of the patients have been found able to accomplish twenty-three hours' schooling a week, and at the examination recently held by Her Majesty's inspector they obtained 90 per cent. of passes. If local treatment be persevered with, I find that ophthalmic patients are capable of undergoing almost as

[1] Since the above was written three metropolitan boards of guardians have formally approved the scheme of central isolation for ophthalmic children. These boards are Lambeth, Camberwell and Bethnal-green. The last has attempted, indeed, to open up direct negotiations with the Hanwell managers.

much schooling as ordinary children, and in organising any scheme of tuition that fact should be kept in view.

The question remains as to what body is to assume the reins of government. It is to be hoped that the Metropolitan Asylums Board, which already controls numerous medical institutions, will see its way to take this added responsibility, otherwise it would be feasible to create an entirely new authority consisting of representatives from all the unions interested. In whatever hands the management may ultimately be vested, it is, I think, of great importance that the whole of the metropolitan schools should be in touch with the proposed institution. To secure that end it would be well to maintain the school, not by contributions from individual unions, but directly from the Metropolitan Common Poor Fund, thereby spreading the charge over the whole London district.

The adoption of a scheme for the collective treatment of ophthalmia, such as I have outlined in the above remarks, is, I would submit, a matter of pressing importance. Such a scheme, placed on a sufficiently broad basis, appears to offer the only satisfactory plan of coping with a disease that has been a scourge in the pauper schools of London from time immemorial. A suitable building is ready and waiting at Hanwell. Should not advantage be taken of so hopeful an opportunity? It would be the conversion of a scientist's vision into a substantial, a praiseworthy and a salutary reality.

Welbeck-street, W.

THE CONFERENCE ON CHOLERA IN ST. PETERSBURG.

(FROM OUR SPECIAL CORRESPONDENT.)

(*Continued from p. 52.*)

DR. GREBENTSCHIKOFF, continuing his statistical account of the epidemic and of the mode of its dissemination, stated that the first case of cholera in Russia occurred in Kaachka, a station on the Transcaspian Railway, on May 19th (31st). The channel by which the infection crossed the frontier is unknown. Many other parts of the Transcaspian and Samarcand provinces were affected in May and June, and from June 6th (18th) suspicious cases began to be admitted into the Baku hospitals. How the disease reached Baku is unknown, but there is evidence that the first patient there was a foreign labourer, who had come from Persia through the Transcaspian province and who stayed at a certain house in Baku which became one of the chief centres of infection in that town, furnishing no less than forty patients in the first week of the epidemic. The disease raged violently in Baku, and the panic-stricken inhabitants fled in all directions, carrying the infection with them. In the first half of June cholera had affected most of the towns lying on the Caspian Sea and had penetrated into the Caucasus. Thence it travelled to Europe by two great routes—on the one hand by the Volga and on the other by railway to the basin of the Don, the first of these being by far the quickest. The speaker proceeded to trace the course of the epidemic by each of these routes, enumerating the "governments" or provinces affected during each succeeding month. He exhibited the following table, showing the area and population of the districts in which the disease was present during each of the months from May to November. The whole of these immense areas was of course not actually affected by cholera. Many large districts remained free from the disease, but every "government" has been included from which a return has been received, although only one "uyezd" (district) or even only one village in the "government" may have suffered from the disease. With this limitation the disease was present:

In May	over	484,000	square versts with	700,000	inhabitants.
In June	"	2,753,000	"	15,286,000	"
In July	"	7,271,000	"	63,466,000	"
In August	"	7,645,000	"	77,895,000	"
In September	"	7,868,000	"	87,346 000	"
In October	"	6,965,000	"	87,725,000	"
In November	"	1,662,000	"	69,787,000	"

The disease has spread mainly along the course of the rivers; it affected the whole systems of the Volga, the Don, the Dnieper, the Ural and the Obi, every part of the Central Asiatic provinces, the systems of the Vistula and Western Dwina and finally the whole of the St. Petersburg district and two "uyezds" of the Olonetz governments.

From a table of the numbers of cases and deaths reported from every government throughout the Empire to the beginning of December it appeared that the Caucasus suffered most severely from the epidemic, the second in order of severity being the Central Asiatic provinces, the third Siberia, particularly the government of Tobolsk, and finally the country of the Don Cossacks and the following European governments: Astrakhan, Saratof, Samara, Simbirsk, Voronej, Orenburg and Tambof. Charts were shown indicating by curves the course of the epidemic week by week in every government, and from these it appeared that the cholera rapidly (in the course of two or three weeks) attained its greatest intensity, that it remained at this height for one or two weeks, and then in a few districts gradually subsided; but more often there was a remission lasting one or two weeks, then the curve again rose, the second rise being followed by a gradual fall. In certain towns even a daily chart showed a similar double rise and remission. The means by which cholera was introduced into a given locality have remained in the immense majority of cases unknown. In twenty-eight governments, however, information had been furnished to the Medical Department on this point, and the speaker proceeded to repeat in detail each of these cases. The general conclusion to be drawn was that pollution of the drinking-water was in almost every case the channel by which the disease was spread.

Professor Janson, the Professor of Statistics in the St. Petersburg Academy and author of several important works on economical questions, read a short but interesting paper on the Value of Statistics. He pointed out the importance of recognising the first case of cholera or any other epidemic disease. The only certain means of doing this was by a thorough and constant system of notification and registration of all diseases, more particularly of infectious diseases. He recommended the adoption of registration of deaths such as is in use in all Western European countries. He also dwelt on the necessity of recording all the circumstances surrounding every case of an epidemic illness, as only in this way can general conclusions on any particular point be arrived at.

A paper was read by Dr. Tolstoi on Precautionary Measures directed against the Dissemination of Cholera. In discussing the question of quarantine he pointed out certain anomalies in the quarantine laws existing in ports on the Black Sea. The efficiency of cordons, the medical inspection of passengers, the disinfection of luggage, the measures taken along the rivers, particularly the Volga, were all briefly reviewed. The following questions were submitted to the conference for discussion in committee:—(1) Quarantine regulations, cordons and military isolation of places; (2) "observation points;" (3) general inspection of passengers; and the following additional points—(*a*) the means of determining the first case of cholera; (*b*) the means of localising the infection.

An important communication was read by Dr. Rozanof on General Precautionary Measures before the appearance of Cholera. He discussed the efficiency of the special Sanitary Commissions and their relation to the sanitary authorities already in existence. These commissions, it should be explained, were formed early in June, in accordance with a Government order, in every town forming the centre of a "government" or *uyezd* throughout the country, with the object of improving the sanitary condition of the town and district before the approach of the epidemic. On this subject Dr. Rozanof put the following questions to the conference: 1. To what extent are special sanitary commissions necessary in the struggle with the epidemic in view of the other sanitary authorities already existing? 2. How should such commissions be constituted? 3. What should be their relation to the Government and local authorities? 4. What should be the limit of their powers and what is to be the source of their revenue? 5. What should be the relation between the Sanitary Commissions and the Medico-Statistical Bureaux? 6. What should be the organisation and the duties of subcommissions? (Last summer subcommissions, consisting of sanitary and police inspectors, were formed in each quarter of the larger Russian towns to inspect and improve the sanitary condition of every building in that particular part of the town.) 7. What should be the number and constitution of the bodies of sanitary overseers, inspectors &c., and their relation to the police? Passing on to discuss the many questions relating to the sanitation of inhabited localities Dr. Rozanof pointed out that wherever the sanitary condition of a town or district had been satisfactory the cholera epidemic had either passed it by altogether or claimed but few victims. He deplored the

fact that such localities were but few in number and gave several instances of towns in an extremely insanitary condition and quite unprepared to meet an epidemic of cholera As in the other papers the points discussed were put in the form of questions and submitted to the committees as follows: 1. Measures of sanitation in inhabited localities. 2. The results of sanitary inspections carried out last summer. 3. Data for judging of the possibility of cleansing the soil and removing of refuse in towns and villages. 4. The means of providing a pure water-supply. 5. The means of inspecting crowded institutions, such as night refuges, lodging-houses, factories &c. These questions have been discussed in committee under the presidency of Professor Kapustin and certain conclusions have been arrived at. The committee declare that special sanitary commissions are necessary and very useful institutions, especially in places where there is no medico-sanitary organisation under the zemstvo. Where there is such an organisation they are most useful if they act in conjunction with the authorities already exisitng. Their success has been so great that they will probably remain in constant existence, though only formed to meet a special danger. The sanitary councils or commissions existing in the Moscow, Saratof and some other governments might be taken as types of institutions which, with certain alterations, could be converted into special sanitary commissions. With regard to their relation to Government and other local authorities, it has been decided that in most cases this should be determined in the constitution of the commission. In order to ensure united action the commissions should have the rights of committees of public health. Finally, as to the limits of their powers the committee consider that this is already provided for in certain articles in the orders of the Medical Council. The question as to the necessity for Government commissions called forth a lively discussion and was ultimately decided in the affirmative.

Demonstrations have been given daily in bacterioscopy in the laboratories of the Imperial Academy of Medicine, in the clinical institute named after the Grand Duchess Helena Pavlovna and in the Alexander Hospital in Memory of the Emancipation of the Serfs. Demonstrations in disinfection have also been given to members of the Conference in the Oldenberg Institute of Experimental Medicine and in the Alexander Hospital in Memory of Botkin.

A report of the proceedings of the Conference will, it is hoped, be published shortly.

THE LONDON POST-GRADUATE COURSE.

THE spring term, 1893, will commence on Monday, Jan. 16th, and will consist of twelve courses of lectures and demonstrations at the following hospitals and institutions, viz. the Hospital for Consumption and Diseases of the Chest, Brompton, the National Hospital for the Paralysed and the Epileptic, Queen-square, the Hospital for Sick Children, Great Ormond-street, the Royal London Ophthalmic Hospital, Moorfields, the Hospital for Diseases of the Skin, Blackfriars, Bethlem Royal Hospital for Lunatics, the London Throat Hospital, the Bacteriological Department, King's College, the Parkes Museum Courses of Lectures and Demonstrations on Morbid Anatomy and Gynæcology and a course of Clinical Lectures on Medicine and Surgery at the Central London Sick Asylum, Cleveland-street, W. The steady growth of the undertaking is well shown by comparing the five courses of the first term with the twelve courses of the tenth, giving 121 entries in 1890, 172 in 1891 and 223 in 1892. The men who enter continue to come chiefly from the British Isles and our own foreign possessions, whilst a considerable sprinkling is drawn from the United States of America. Most of the men possess good degrees and high qualifications, and several lecturers from our Colonies have come to study the methods of teaching employed in the metropolis. The opening of the Poor Law Infirmaries has enabled the committee to invite the coöperation of several distinguished emeritus professors, and their vast experience has thus been made available for clinical teaching, whilst a mass of material hitherto unused has been placed at their disposal. The medical schools have found that this undertaking in no way clashes with their work, and, in fact, serves to supplement it. All the varied wants of practitioners, whether they have come from distant parts of the world or are living in our midst, have as far as possible been met. They have entered for a whole term, half a term (one month) or for one week, at proportionate fees, or they have attended all the lectures at one hospital for a term or for half a term, as best suited their wants and wishes. A full prospectus can be obtained from Dr. Fletcher Little, 60, Welbeck-street, W.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Kensington Parish.—The death-rate for this parish during 1891 was 18·4 per 1000, or 1·8 above the decennial average and 3·0 below that for the metropolis as a whole. The zymotic rate was 1·6 per 1000. Dealing with this latter group, Dr. Dudfield refers to measles and points out that it yet remains to be proved whether great advantage would accrue from its inclusion amongst the notifiable diseases. This is a point as to which opinion varies a good deal, but as to which it is to be hoped we may soon have such information as has accumulated in different parts of the country. Of 323 cases of scarlet fever that were recorded 206 were removed to hospital. The work of the sanitary inspectors is recorded, as is also the action taken under a number of different headings, such as offensive trades, refuse removal, slaughter-houses, dairies &c.; but a large part of the volume is taken up with general questions of legislation, the work of the Metropolitan Asylums Board, metropolitan sewage purification &c. In fact, the volume might not only properly bear, but well merit, a title indicating a work of much wider scope.

Birkenhead Urban District.—This report constitutes the last of an excellent series of annual reports by Mr. Francis Vacher, who has since resigned his post as medical officer of health. The death-rate for 1891 was 20·9 per 1000, the zymotic rate being 2·63, and amongst the latter group of diseases there figured 38 cases of typhus fever, a disease the prevalence of which should make Birkenhead determine that it will not rest until it has abolished it. Notification revealed 1007 cases of infectious disease, but some cases, including mild cases of typhus fever, must have remained unnotified. In another respect the borough needs to mend its ways, for it still retains old-fashioned midden privies, and refuse nuisances are by no means exceptional. Only 47 cases of infectious disease were removed to the isolation hospital; but it is to be hoped that when Birkenhead possesses a hospital which has some pretence of meeting its needs the authority will do something more than merely touch the fringe of this subject, and that they will no longer fine people even 2*s.* a day for going into the hospital for the protection of the public health. According to Mr. Vacher, however, matters move very slowly as to this in the borough. Birkenhead is certainly not one of the progressive boroughs in this and other respects; but it is not for the want of excellent skilled advice.

Cardiff Urban District.—The death-rate in Cardiff during 1891 was 22·0 per 1000, the zymotic rate being 2·1. Dr. Walford enters in much detail into the question of vital statistics and of the distribution, seasonally and otherwise, of diseases belonging to the zymotic group, and he illustrates the various points by means of some excellent tables and diagrams. He also reports that systematic inspection of the district is maintained, and he points out that new by-laws have been obtained as to a number of matters bearing upon public health. Analysis of foods was made in 154 cases and in 13 cases they were found to be adulterated. In each case a fine varying from 10*s.* to £5 was imposed, the smaller fines being in the main imposed in the case of milk-supplies, the purity of which is so important to healthy infant life, whilst the larger one was reserved for a margarine case.

County of Essex.—Dr. Thresh has again reviewed and summarised the annual reports of medical officers of health within the administrative county of Essex. The report deals separately with subjects such as death-rates, sanitary progress, prevalence of certain diseases &c., and then it gives a summary of each of the reports on the several component sanitary districts. A report of this class must have very considerable local value; above all, it affords to the different sanitary authorities concerned a means of comparing the several phases

of sanitary action taken or neglected in different parts of the county and the several results that have ensued.

Northampton Urban District.—Mr. L. F. Cogan reports that epidemic influenza was a cause of much mortality in Northampton in the early half of 1891, the general rate of mortality being 18·5 per 1000, a rate which exhibited an increase over that for 1890. The zymotic rate was 1·7 per 1000 and the infantile rate 164 per 1000 births. Notification of infectious disease works without difficulty and each intimation of preventable disease is utilised for the purposes of inspection and amendment of faulty sanitary circumstances. A new infectious hospital is now in use, both scarlet fever and enteric fever cases having been under isolation there during the year. Active sanitary work is in progress and an account is given of the action taken in a large number of small streets and courts in the borough. Indeed, 1889 cases were attended to, 969 sets of articles were disinfected and the general activity displayed is evidently having a marked influence upon the health of the town.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6194 births and 5775 deaths were registered during the week ending Jan. 7th. The annual rate of mortality in these towns, which had been 20·0 and 24·3 per 1000 in the preceding two weeks, further rose last week to 29·2, a higher rate than in any week since February last. In London the rate was 30·4 per 1000, while it averaged 28·3 in the thirty-two provincial towns. The lowest rates in these towns were 18·2 in Croydon, 20·8 in Bristol, 21·6 in Cardiff and 22·0 in Nottingham; the highest rates were 33·6 in Manchester, 34·7 in Leeds, 36·5 in Bolton and 40·5 in Salford. The 5775 deaths included 431 which were referred to the principal zymotic diseases, against 382 and 473 in the preceding two weeks; of these, 134 resulted from measles, 107 from whooping-cough, 65 from diphtheria, 64 from scarlet fever, 32 from diarrhœa, 25 from "fever" (principally enteric) and 4 from small-pox. No fatal case of any of these diseases occurred last week in Birkenhead or in Huddersfield; in the other towns they caused the lowest death-rates in Croydon, Norwich and Wolverhampton, and the highest rates in Bradford, Salford, Preston and Bolton. The greatest mortality from measles occurred in West Ham, Bradford, Hull, Brighton, Derby, Salford, Plymouth and Bolton; from scarlet fever in Burnley and Swansea; and from whooping-cough in Leicester, Preston, Birmingham and Salford. The mortality from "fever" showed no marked excess in any of the large towns. The 65 deaths from diphtheria included 47 in London, 4 in Manchester, 3 in Birmingham, 2 in Portsmouth and 2 in Salford. Two fatal cases of small-pox were registered in Oldham, 1 in Liverpool and 1 in Halifax, but not one in London or in any other of the thirty-three large towns; 38 cases of this disease were under treatment in the Metropolitan Asylum Hospitals on Saturday last. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 3121, against 3626, 3299 and 3254 on the preceding three Saturdays; 202 new cases were admitted during the week, against 241 and 246 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had increased from 365 to 523 in the preceding three weeks, further rose, under the influence of the recent cold weather, to 953 last week, and exceeded by 264 the corrected average. The causes of 140, or 2·4 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Croydon, Cardiff, Bolton, Oldham and in six other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Salford, Blackburn, Sheffield and Gateshead.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·0 and 28·5 per 1000 in the preceding two weeks, declined again to 27·1 during the week ending Jan. 7th, and was 2·2 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 20·7 in Greenock and 24·0 in Perth to 28·6 in Leith and 30·1 in Edinburgh. The 765 deaths in these towns included 79 which were referred to measles, 20 to whooping-cough, 17 to scarlet fever, 12 to diarrhœa, 10 to diphtheria, 7 to "fever" and 1 to small-pox. In all, 146 deaths resulted from these principal zymotic diseases, against 132 and 131 in the preceding two weeks. These 765 deaths were equal to an annual rate of 5·2 per 1000, which was 3·0 above the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 86 in each of the preceding two weeks, declined to 79 last week, of which 32 occurred in Glasgow, 23 in Edinburgh, 9 in Dundee and 7 in Leith. The deaths referred to whooping-cough, which had increased from 5 to 17 in the preceding three weeks, further rose to 20 last week and included 16 in Glasgow. The fatal cases of scarlet fever, which had declined from 18 to 7 in the preceding three weeks, rose again to 17 last week, of which 8 occurred in Glasgow, 6 in Edinburgh and 2 in Leith. The 10 deaths from diphtheria slightly exceeded the number in the preceding week and included 4 in Glasgow and 2 in Aberdeen. Of the 7 fatal cases of "fever" 4 occurred in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 168 and 212 in the preceding two weeks, further rose last week to 217 and exceeded by 17 the number in the corresponding week of last year. The causes of 83, or nearly 11 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased from 22·8 to 33·4 per 1000 in the preceding six weeks, declined again to 31·3 during the week ending Jan. 7th. During the thirteen weeks of the last quarter the death-rate in the city averaged 24·4 per 1000, against 18·4 in London and 23·9 in Edinburgh. The 210 deaths in Dublin during the week under notice showed a decline of 14 from the number in the preceding week, and included 11 which were referred to "fever," 3 to measles, 2 to whooping-cough, 1 to diarrhœa, and not one either to small-pox, scarlet fever, or diphtheria. In all, 17 deaths resulted from these principal zymotic diseases, equal to an annual rate of 2·5 per 1000, the zymotic death-rate during the same period being 2·2 in London and 6·6 in Edinburgh. The deaths referred to different forms of "fever," which had been 9 and 4 in the preceding two weeks, rose again to 11 last week, a higher number than has been recorded in any week since December, 1891. The fatal cases of measles, which had been 2 and 1 in the preceding two weeks, rose to 3 last week. The two deaths from whooping-cough corresponded with the number in the preceding week. The 210 deaths registered in Dublin last week included 20 of infants under one year of age and 72 of persons aged upwards of sixty years; the deaths of infants showed a slight decline, and those of elderly persons showed a slight further increase upon recent weekly numbers. Five inquest cases and 5 deaths from violence were registered; and 71, or one-third, of the deaths occurred in public institutions. The causes of 21, or 10 per cent., of the deaths in the city last week were not certified.

VITAL STATISTICS OF LONDON DURING DECEMBER, 1892.

In the accompanying table will be found summarised complete statistics relating to sickness and mortality during the month of December in each of the forty-one sanitary districts of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the nine diseases in the accompanying table was equal to 11·0 per 1000 of the population, estimated at 4,263,294 persons in the middle of the year. Owing to the decreasing prevalence of scarlet fever in London this rate showed a further decline from those recorded in the preceding two months, which had been 17·9 and 14·6 per 1000. Amongst the various sanitary districts the rates last month were considerably below the average in Kensington, St. George Hanover-square, St. James Westminster, Marylebone, St. Martin-in-the-Fields, St. Olave Southwark, and Woolwich; while they showed the largest excess in Hackney, Clerkenwell, St. George-in-the-East, Limehouse, Mile-end Old Town, Poplar and Plumstead. The prevalence of small-pox in London showed a slight further increase during December, 37 cases being notified during the month, against 3, 10 and 32 in the preceding three months; of these 6 belonged to Hackney, 5 to Marylebone, 5 to Camberwell, 3 to Greenwich, and 3 to Whitechapel sanitary areas. The Metropolitan Asylum Hospitals contained

MONTHLY ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON.—DECEMBER, 1892.

(Specially compiled for THE LANCET.)

Sanitary areas.	Estimated population in the middle of 1892.	Notified Cases of Infectious Disease.										Deaths from Principal Infectious Diseases.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fever.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON	4,263,294	37	1915	715	1	226	15	39	655	4	3607	11·0	1	141	104	224	90	—	43	1	58	667	2·0	6364	19·5	145
West Districts.																										
Paddington	119,190	—	41	30	—	8	—	—	11	—	90	9·8	—	1	1	4	4	—	2	—	—	12	1·3	154	16·8	129
Kensington	166,721	—	49	8	—	5	—	3	21	—	86	6·7	—	—	3	2	4	—	2	—	—	11	0·9	199	15·6	145
Hammersmith	100,642	—	32	18	—	4	—	2	11	—	67	8·7	—	2	—	3	1	—	1	—	1	8	1·0	123	15·9	132
Fulham	98,195	—	40	5	—	4	—	3	10	—	62	8·2	—	2	5	3	3	—	—	—	2	15	2·0	140	18·6	202
Chelsea	97,300	1	34	10	—	5	—	—	11	—	70	9·4	—	—	3	5	1	—	—	—	3	12	1·6	120	16·1	161
St. George Hanover-square	76,946	1	18	9	—	10	—	—	3	—	41	6·9	—	1	3	2	1	—	3	—	2	12	2·0	106	18·0	176
Westminster	55,203	—	17	8	—	6	1	—	4	—	36	8·5	—	—	3	3	3	—	—	—	—	9	2·1	82	19·4	58
St. James Westminster	24,368	—	1	—	—	2	—	—	1	—	5	2·7	—	—	—	—	—	—	—	—	1	1	0·5	28	15·0	200
North Districts.																										
Marylebone	140,799	5	30	14	—	11	1	2	13	—	76	7·0	—	1	4	5	4	—	3	—	3	20	1·9	216	20·0	148
Hampstead	71,652	—	19	10	—	8	1	1	7	—	46	8·4	—	—	—	3	—	—	—	—	—	3	0·5	65	11·8	171
St Pancras	234,207	1	93	36	—	12	2	5	55	—	204	11·4	—	5	9	10	7	—	3	—	6	40	2·2	358	19·9	147
Islington	324,451	1	165	65	—	18	—	2	54	—	305	12·3	—	8	8	16	6	—	7	—	3	48	1·9	439	17·6	127
Hackney	235,370	6	144	39	—	15	—	4	42	—	250	13·8	—	7	9	13	7	—	2	1	3	42	2·3	318	17·6	130
Central Districts.																										
St. Giles	39,071	—	14	12	—	2	—	—	5	—	33	11·0	—	1	1	6	—	—	2	—	—	10	3·3	71	23·7	205
St. Martin-in-the-Fields	14,204	—	2	2	—	—	1	—	2	—	7	6·4	—	—	—	2	—	—	—	—	—	2	1·8	19	17·4	71
Strand	24,256	1	6	4	—	2	—	—	1	—	14	7·5	—	—	—	1	—	—	1	—	1	3	1·6	49	26·2	342
Holborn	32,912	—	7	8	—	2	—	—	4	—	21	8·3	—	—	—	2	—	—	—	—	—	2	0·8	62	24·6	275
Clerkenwell	65,482	1	37	24	—	3	—	—	15	—	78	15·5	—	—	1	5	3	—	—	—	3	12	2·4	121	24·1	139
St. Luke	41,850	1	13	3	—	—	—	—	12	—	29	9·0	—	—	—	3	1	—	1	—	1	6	1·9	74	23·1	68
City of London	36,692	—	17	13	—	1	—	—	4	—	35	12·4	—	1	1	4	—	—	1	—	—	7	2·5	55	19·5	187
East Districts.																										
Shoreditch	123,683	—	58	9	—	2	1	4	20	—	94	9·9	—	2	—	4	2	—	1	—	1	10	1·1	194	20·4	171
Bethnal Green	129,408	1	66	44	—	5	—	—	22	—	138	13·9	—	14	4	17	2	—	3	—	1	41	4·1	236	23·8	164
Whitechapel	74,853	3	31	12	—	6	—	—	10	—	65	11·3	—	3	3	2	1	—	2	—	—	11	1·9	127	22·1	136
St. George-in-the-East	45,343	2	20	16	—	2	—	—	11	—	51	14·7	1	—	4	7	1	—	—	—	1	14	4·0	87	25·0	124
Limehouse	57,480	—	43	9	—	6	—	1	11	—	70	15·9	—	3	—	3	—	—	—	—	1	7	1·6	99	22·4	156
Mile End Old Town	107,811	1	65	23	—	9	—	2	31	—	131	15·8	—	2	2	9	—	—	1	—	2	16	1·9	197	23·8	142
Poplar	167,857	—	131	26	—	17	4	3	38	—	219	17·0	—	13	5	7	2	—	3	—	6	36	2·8	284	22·1	148
South Districts.																										
St. Saviour Southwark	26,973	—	9	3	—	—	—	—	7	—	19	9·2	—	—	—	2	—	—	1	—	—	3	1·4	39	18·8	78
St. George Southwark	59,846	1	23	5	—	—	—	—	6	—	35	7·6	—	2	2	2	2	—	—	—	—	8	1·7	114	24·8	218
Newington	116,649	—	58	22	—	5	—	—	15	—	100	11·2	—	2	1	10	5	—	1	—	1	20	2·2	221	24·7	154
St. Olave Southwark	12,787	—	3	1	—	1	—	—	1	—	6	6·1	—	—	1	—	—	—	—	—	—	1	1·0	25	25·5	303
Bermondsey	84,440	1	41	10	—	6	—	1	16	—	75	11·6	—	1	2	2	—	—	—	—	—	5	0·8	128	19·8	112
Rotherhithe	39,459	—	8	3	—	2	—	—	9	—	22	7·3	—	9	1	1	2	—	—	—	1	14	4·6	68	22·5	148
Lambeth	277,917	1	131	49	—	12	2	1	41	4	241	11·3	—	17	5	15	8	—	1	—	—	46	2·2	441	20·7	136
Battersea	156,313	—	74	45	—	2	—	1	19	—	141	11·8	—	2	6	9	9	—	—	—	4	30	2·5	223	18·6	136
Wandsworth	164,003	—	77	29	—	9	1	3	23	—	142	11·3	—	3	3	7	—	—	2	—	4	19	1·5	190	15·1	118
Camberwell	241,465	5	123	25	—	9	—	—	26	—	188	10·2	—	11	6	9	3	—	2	—	3	34	1·8	341	18·4	129
Greenwich	169,734	3	76	21	1	2	—	1	35	—	139	10·7	—	18	3	9	4	—	1	—	2	37	2·8	275	21·1	165
Lewisham (excluding Penge)	74,673	—	21	10	—	3	—	—	16	—	50	8·7	—	3	—	2	4	—	—	—	1	10	1·7	90	15·7	153
Woolwich	41,376	1	7	4	—	3	—	—	7	—	22	6·9	—	1	2	2	—	—	2	—	1	8	2·5	65	20·5	96
Plumstead	91,704	—	68	23	—	6	1	—	5	—	103	14·6	—	6	3	13	—	—	—	—	—	22	3·1	121	17·2	131
Port of London	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 58 cases of membranous croup.

39 small-pox patients at the end of December, against 6 and 20 at the end of the preceding two months; the weekly admissions averaged 10, against 1 and 5 in the previous two months. The prevalence of scarlet fever in London during December showed a considerable further decline from that recorded in recent months; this disease was proportionally most prevalent in Islington, Hackney, Clerkenwell, Bethnal Green, Limehouse, Mile-end Old Town, Poplar, Newington and Plumstead sanitary areas. The Metropolitan Asylum Hospitals contained 3168 scarlet fever patients at the end of December, against 3843 and 3754 at the end of the preceding two months; the weekly admissions averaged 254, against 355, 429 and 363 in the previous three months. Diphtheria showed increasing prevalence during the month under notice; this disease was proportionally most prevalent in Paddington, St. Giles, Holborn, Clerkenwell, City of London, Bethnal Green, St. George-in-the-East, Battersea and Plumstead sanitary areas. There were 288 cases of diphtheria under treatment in the Metropolitan Asylum Hospitals at the end of December, against 318, 312 and 255 at the end of the preceding three months; the weekly admissions averaged 53, against 54, 57 and 48 in the previous three months. Enteric fever was proportionally most prevalent during December in St. George Hanover-square, Westminster, Hampstead and Poplar. The Metropolitan Asylum Hospitals contained 87 enteric fever patients at the end of December, against 124 and 113 at the end of the preceding two months; the weekly admissions averaged 12, against 15 in each of the previous two months. Erysipelas showed the highest proportional prevalence in St. Pancras, St. Luke, Mile-end Old Town, Poplar, Greenwich and Lewisham sanitary areas. Five cases of puerperal fever were notified during December in St. Pancras, 4 in Hackney, 3 in Kensington, 3 in Fulham, 3 in Poplar and 3 in Wandsworth sanitary districts.

The mortality statistics in the accompanying table relate to the deaths of persons actually belonging to the various metropolitan sanitary districts, the deaths occurring in the institutions of London having been distributed amongst the various sanitary districts in which the patients had previously resided. The distribution of these deaths, and especially of those resulting from zymotic diseases, affords the most trustworthy data that can be secured upon which to calculate reliable rates of mortality. During the four weeks ending on Saturday, Dec. 31st, the deaths of 6364 persons belonging to London were registered, equal to an annual rate of 19·5 per 1000, against 15·7, 17·1 and 17·9 in the preceding three months. The lowest death-rates during December in the various sanitary districts were 11·8 in Hampstead, 15·1 in Wandsworth, 15·0 in St. James Westminster, 15·6 in Kensington, 15·7 in Lewisham (excluding Penge), 15·9 in Hammersmith and 16·1 in Chelsea; in the other sanitary districts the rates ranged upwards to 24·1 in Clerkenwell, 24·6 in Holborn, 24·7 in Newington, 24·8 in St. George Southwark, 25·0 in St. George-in-the-East, 25·5 in St. Olave Southwark, and 26·3 in the Strand. During the four weeks of December 667 deaths were referred to the principal zymotic diseases in London; of these, 224 resulted from diphtheria, 141 from measles, 104 from scarlet fever, 90 from whooping-cough, 58 from diarrhœa, 49 from different forms of "fever" (including 48 from enteric fever and 1 from an ill-defined form of continued fever) and 1 from small-pox. These 667 deaths were equal to an annual rate of 2·0 per 1000, against rates declining from 3·9 to 1·8 in the preceding five months. Amongst the various sanitary districts the lowest zymotic death-rates were recorded in Kensington, Hammersmith, St. James Westminster, Hampstead, Holborn, St. Olave Southwark, and Bermondsey; and the highest rates in St. Giles, Bethnal Green, St. George-in-the-East, Poplar, Rotherhithe, Greenwich and Plumstead. Only 1 fatal case of small-pox was registered in London during the month under notice, the corrected average number in the corresponding period of the preceding ten years being 16; this case belonged to St. George-in-the-East sanitary district. The 141 deaths referred to measles were rather less than half the average; among the various sanitary districts this disease showed the highest proportional fatality in Bethnal Green, Poplar, Rotherhithe, Greenwich and Plumstead. The 104 fatal cases of scarlet fever were 6 below the corrected average; this disease was proportionally most fatal in Fulham, St. George-in-the-East and Battersea sanitary districts. The 224 deaths referred to diphtheria were more than double the corrected average; this disease showed the highest proportional fatality in St. Giles, Clerkenwell, City of London, Bethnal Green, St. George-in-the-East, Mile-end Old Town, Newington and Plumstead sanitary districts. The 90 fatal cases of whooping-cough were 128 below the corrected average; this disease was somewhat fatally prevalent in Newington, Battersea and Lewisham. The 49 deaths referred to different forms of "fever" were 25 below the corrected average; there was no marked excess of "fever" mortality in any of the sanitary districts during the month under notice. The 58 deaths from diarrhœa almost corresponded with the average. In conclusion, it may be stated that the mortality in London during December from these principal zymotic diseases in the aggregate was as much as 24 per cent. below the average.

Infant mortality in London, measured by the proportion of deaths under one year of age to registered births, was equal to 145 per 1000, and was considerably below the average; the lowest rates of infant mortality were recorded in Westminster, St. Martin-in-the-Fields, St. Luke, St. Saviour Southwark, Bermondsey and Plumstead; the highest rates in St. James Westminster, St. Giles, Strand, Holborn, St. George Southwark, and St. Olave Southwark.

THE SERVICES.

MOVEMENTS OF MEDICAL STAFF.

SURGEON-COLONEL PRESTON has embarked for Hong-Kong to succeed Surgeon-Colonel Paterson in the Administrative Medical Charge. Surgeon-Lieutenant-Colonel Ash, Retired List, has been appointed to the Medical Charge at Fleetwood. Surgeon-Major Green has resumed his duties in Burmah, after leave of absence in England, and Surgeon-Major Carleton has arrived in Bombay on return from sick leave. Brigade-Surgeon Scott has relinquished the half-pay appointment at Sheffield. Surgeon-Major Lane has been taken on the strength of the Portsmouth district. Surgeon-Captains James and Westcott have arrived at Hong-Kong on a tour of service. Surgeon-Lieutenant-Colonel Finlay has been transferred from Hounslow to Sherness. Surgeon-Captain Cockerill has arrived in India on return from sick leave. Surgeon-Captain Salvage has joined for duty at Woolwich; Surgeon-Captain Philson at Aldershot; Surgeon-Captain Greig at Dover and Surgeon-Captain Squire at Shoeburyness.

ARMY MEDICAL STAFF.

Surgeon-Major Charles Bere, Medical Staff Corps, to be Quartermaster, with the honorary rank of Lieutenant, vice Honorary Captain W. McKay, retired on temporary half-pay (dated Jan. 11th, 1893).

INDIA AND THE INDIAN MEDICAL SERVICE.

The following appointments have been made:—2nd Bengal Infantry: Surgeon-Lieutenant-Colonel T. Robinson, from the Medical Charge of the 1st Battalion 1st Gurkha Rifles to the Officiating Medical Charge of the Regiment. 4th Bengal Infantry: Surgeon-Captain E. Jennings to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain B. K. Basu. 5th Bengal Light Infantry: Surgeon-Captain C. N. C. Wimberley to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain U. N. Mukerji. 2nd Bengal Light Infantry: Surgeon-Lieutenant-Colonel T. Robinson, from the Officiating to the Medical Charge of the Regiment, vice Surgeon-Major G. A. Cones, retired. 14th Sikhs: Surgeon-Captain W. H. E. Woodwright to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain W. M. Lane. 16th Bengal Infantry: Surgeon-Captain B. C. Oldham from the Officiating Medical Charge of the 2nd Bengal Light Infantry to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain E. R. W. C. Carroll. 31st Punjab Infantry: Surgeon-Captain B. J. Singh, to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain J. G. Jordan. 34th Pioneers: Surgeon-Captain E. W. Hore to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain W. H. B. Robinson. 7th Regiment Madras Infantry: Surgeon-Lieutenant W. E. A. Armstrong, I.M.S., to the Officiating Medical Charge of the Regiment. Surgeon-Lieutenant-Colonel M. Knox, M.S., Ranikhet, is appointed to hold Charge of the Civil Medical duties of Ranikhet in addition to his military duties from Nov. 19th, 1892. 18th Bengal Infantry: Surgeon-Captain J. C. S. Vaughan to the Officiating Medical Charge of the Regiment, vice Surgeon-Captain J. F. Evans. The undermentioned officer has been granted permission to return to duty:—Surgeon-Lieutenant-Colonel R. A. K. Holmes, I.M.D., Superintendent, Central Prison, Lucknow. The services of

Surgeon-Captain R. J. Baker, M.A., M.D., have been placed at the disposal of the Government of India in the Foreign Department. Veterinary-Captain F. J. Short has been appointed to the Civil Veterinary Department on probation and posted to the Central Provinces and Berar. Surgeon-Major J. C. Marsden has been appointed Civil-Surgeon, Negapatam, in succession to Surgeon-Major Bain. Surgeon-Captain A. Buchanan, Superintendent of the Raipur Central Gaol, has been appointed to the Charge of the Nagpur Central Gaol. Surgeon P. W. O'Gorman, I.M.S., Bengal Establishment, Medical Officer of the Mushkof-Bolan State Railway, has been transferred from the P. W. Department to the Home Department. Surgeon-Lieutenant-Colonel A. A. Macrobin assumed Charge of the Civil Medical duties of Kasauli on the forenoon of Dec. 2nd, 1892, relieving Surgeon-Lieutenant-Colonel M. D. O'Connell. Surgeon-Captain E. D. Bringhurst-Farmar, A.M.S., has been granted an extension of leave from Dec. 7th 1892 to June 6th 1893 on medical certificate.

NAVAL MEDICAL SERVICE.

The following appointments have been made:—Staff Surgeons: Myles O'C. M'Swiney to the *Eagle* (dated Jan. 5th, 1893) and J. A. Collot to the *Collingwood* (undated). Surgeons: Evan St. M. Nepean to the *Minotaur* (dated Jan. 5th, 1893); John H. Stenhouse to the *Collingwood* (undated); James M. France to the *Swiftsure* (dated Jan. 11th, 1893). Surgeon and Agent: Thomas W. Pairman at Lyttelton, New Zealand, and James B. Lawson, M.D., at Rothesay (both dated Jan. 2nd, 1893).

YEOMANRY CAVALRY.

Hampshire (Carabiniers): Surgeon-Lieutenant G. F. A. England, M.B., to be Surgeon-Captain (dated Jan. 7th, 1893).

VOLUNTEER CORPS.

Engineer: 1st West Riding of Yorkshire (Sheffield): Thomas Stewart Adair, M.B., to be Surgeon-Lieutenant (dated Jan. 7th, 1893).—*Rifle:* 2nd Volunteer Battalion, the Gloucestershire Regiment: Honorary Assistant Surgeon C. W. Morris resigns his commission (dated Jan. 7th, 1893).—1st Volunteer Battalion, Princess Charlotte of Wales (Royal Berkshire Regiment): Surgeon-Captain J. H. Walters resigns his commission (dated Jan. 7th, 1893).—2nd Volunteer Battalion, the Duke of Edinburgh's (Wiltshire Regiment): Surgeon-Major E. N. Carless to be Surgeon-Lieutenant-Colonel (dated Jan. 7th, 1893).

INFANTRY VOLUNTEER BRIGADE.

Manchester Brigade: Surgeon-Captain Duncan, M.B., 3rd Volunteer Battalion, the Manchester Regiment, to be Brigade-Surgeon-Lieutenant-Colonel (dated Jan. 7th, 1893).

OBITUARY.

Brigade-Surgeon J. Wallace, Retired List, Army Medical Staff, died at Hotel des Palmiers, Nice, on the 22nd ult. He joined the Army June 2nd, 1857; became Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1873; and retired with the honorary rank of Brigade-Surgeon May 30th, 1885. He served in the Afghan War of 1878-79 (medal), and also in the Soudan Expedition, under Sir Gerald Graham in 1884 (medal and Khedive's star).

THE NEW ROYAL WARRANT.

We understand that the privilege of counting twelve months of half-pay towards retirement lately conferred by Royal Warrant is to be enjoyed by all officers on the full-pay list at the time of its promulgation. The effect of this is that every officer now serving will benefit by the concession, whether he was on half-pay prior to the issue of the Warrant or not.

SURGEON-COLONEL PRESTON, P.M.O.

The officers of the Medical Staff, Belfast district, entertained Surgeon-Colonel Preston, P.M.O., at dinner on the 28th ult., at the Royal Avenue Hotel, prior to his departure for Hong-Kong, he having been selected for the appointment of Principal Medical Officer of the China Station. The following were amongst those invited or present:—Major-General Godfrey Clerk, C.B.; Surgeon-Major-General J. Sinclair, Col. O'Grady Haly, D.S.O., A.A.G.; Colonel Dawson, 83rd Regimental District; Lieutenant-Colonel Glencross, 1st Lancashire Fusiliers; Lieutenant-Colonel Parker, R.E.; Lieutenant-Colonel St. Paul, 2nd Rifle Brigade; Brigade-Surgeon M'Farland, Lieutenant-Colonel Challice, A.S. Corps; Lieutenant-Colonel Brereton, A.P.D.; Major M. Johnson, D.A.A.G.; Major Holland, 15th Hussars; Mr. Bond, Medical Staff Corps; Dr. Walton Browne, President, North of Ireland Branch, British Medical Association; and Dr. Whitaker, President, Ulster Medical Society.

MEDICAL EXAMINATION OF MILITIA OFFICERS.

Successful candidates for commissions in the army will in future be inspected by a medical board after the competitive examination and no candidate will be considered eligible for a commission unless certified by the board to be physically fit in all respects for Her Majesty's service.

THE HURDWAR FAIR.

The Government of the North-Western Provinces and Oudh has appointed a committee to examine and report on the sanitary conditions of Hurdwar on the occasions of the great bathing fairs, consisting of the Sanitary Commissioner to the Local Government as president, with an engineer officer of experience and the magistrate of Saharanpur; and associated with these officials five Hindu gentlemen who have been requested to aid the Government with their advice. This is a wise policy to adopt, and we trust that measures will be devised for making the sanitary and other arrangements for these fairs satisfactory—especially in the way of securing a good water-supply for potable purposes and fresh running water for the bathing place of the pilgrims. Arrangements against overcrowding and fouling of the surface soil are also required, together with power to break up and disperse the assembly in case of need.

THE NEW GERMAN ARMY BILL.

This continues to excite great attention in Germany and on the Continent generally. During the last twenty years the cost of military defences in Europe has nearly doubled and the enormous expenditure under which the nations are groaning can scarcely be increased further—indeed, the wonder is how it can be borne, and how it is proposed to find the number of medical officers that will be required if these forces ever come into collision, armed as they are with quick-firing rifles and arms of precision. This great increase of European armies has taken place since the termination of the Franco-German War; and the loss of Alsace-Lorraine by the French naturally gave rise to the enormous increase of their army, which is now said to number 4,350,000 men. If the new Army Bill passes the German army will in a few years have a strength of 5,000,000. The strongest military Power in Europe, however, is Russia, which has at its disposal 6,000,000 soldiers to carry out a policy which can scarcely be described as one of peace and goodwill to men.

THE RUPEE AND INDIAN SERVICE.

Service in India is not very popular at the present time and medical officers are not likely to be attracted to that country by the emoluments it offers. The fallen and still falling rupee has become a serious question; meetings are being held in the large cities of India—by the Bombay branch of the Indian Currency Association, for example—at which resolutions are passed for petitioning the Government of India to urge the Secretary of State to sanction the immediate closing of the mints for the coinage of silver as the only prompt way of relieving the Government of its financial troubles. India, it is urged, is the only country where the mints are open to an unrestricted coinage of silver.

Correspondence.

"Audi alteram partem."

"THE LATE DR. WALSHE."

To the Editors of THE LANCET.

SIRS,—It would be a pity if no voice were to go forth from Scotland as a tribute to the late Dr. Walshe, and although it may be in one sense a superfluity to praise where all are of one mind, yet you will perhaps allow me a few lines to echo, as it were, the voices of your English correspondents. My acquaintance with Dr. Walshe (no doubt far less intimate than theirs) goes back a long way—to the time, in fact, when he was still a clinical teacher in University College Hospital and just emerging into consulting practice, in the presence of such men as Watson, Latham and C. J. B. Williams. Even in these days I can distinctly recall the impression on my own mind as an outsider (so to speak) in London professional circles that in precision of method and fulness of individual information Dr. Walshe was difficult to surpass, and I think I should have placed him even then first

amongst English auscultators. In view of the successive editions of his (now subdivided) works on the heart and the lungs respectively, there will be few, I think, who will now question this precedency. In spite of a tendency to over-refinement, which makes it more difficult, perhaps, apart from the personal traditions of his teaching, to recommend these works to students, I have always placed them in the very front rank, giving explanations in detail where the difficulties come in, or where I fancy they come in, so as to be perplexing to students not bred in University College traditions or by Dr. Walshe's own pupils. This explained, Dr. Walshe's books are even now better worth studying in many respects than any of their more modern rivals, and certainly beyond all comparison superior in impartiality and breadth of view to Skoda's running commentaries on Laennec. The curious anecdote by Dr. Wilks in THE LANCET of to-day goes to show that, with all his admiration for Louis as his early teacher and his high estimate of the numerical method Dr. Walshe was fully alive to the limitations of the method and regarded it, as many of us now are disposed to regard the "pre-Raphaelite" school in art, as only a "stepping-stone to higher things." My personal opportunities of meeting Dr. Walshe occurred at such rare and distant intervals that the sum of them does not come to much, but I can well understand and appreciate all that is said of him from the higher point of view of his character and genius. Dr. Walshe's was not, however, the genius that scornfully rejects details or aims at posing in an attitude of mental superiority. He was *naturæ minister et interpres*, but chiefly and, above all, the latter.

I am, Sirs, yours truly,

Glasgow, Jan. 7th, 1893. W. T. GAIRDNER, LL.D., M.D.Edin.

BICARBONATE OF POTASH IN INFLUENZA.

To the Editors of THE LANCET.

SIRS,—In your "Annus Medicus 1892," under the heading, "Therapeutic Progress," the following sentence occurs: "Influenza in the earlier part of the year, and cholera in the autumn, produced a crop of specifics of which little need be said beyond noting that the efficacy claimed for them was, as usual, greatest during the decline of the epidemics." The writer seems to convey the impression that no progress worth noting has been made during 1892 in the treatment of influenza and cholera. I demur to the accuracy of this statement in the case of influenza. Three years ago, by a process of reasoning from facts placed at my disposal (as at the disposal of all) by the most reliable living bacteriologists, I hoped that I had found an effectual and speedy remedy for influenza. On July 16th, 1891, I communicated my discovery to the members of the Border Counties Branch of the British Medical Association in an address which, as president, my position imposed upon me.

An abstract of my address appeared in THE LANCET on Dec. 19th, 1891. I naturally watched the subsequent issues with expectancy, but the article seemed to me at the time to have fallen flat and to have arrested very little attention; however, it was not quite so, as I afterwards found out. You very liberally published a leader in THE LANCET of Jan. 23rd, 1892, calling the attention of the profession to my conclusions, but declining insertion of the evidence I adduced as to the value of my remedy. The bold, fearless and fair statements in that leader more than atoned for the airs of superiority assumed by the writer. One of the best known and most respected teachers in the University of Edinburgh had previously stated, from personal knowledge, his full conviction of the thoroughly satisfactory character of the new treatment. I give his *ipsissima verba* from his letter now lying before me: "My strength never suffered, and indeed my rapid recovery and immunity from all of the unpleasant after-consequences of influenza made it somewhat difficult for me to believe that I had actually successfully combated an affection which has led to such consequences in some of its victims. However, there can be no doubt about the correctness of the diagnosis, the value of your remedy, or the satisfactory results of its energetic use." In the most manly and straightforward manner he has given me leave to make use of his name and experience in support of my contention. I refer to Dr. David Hepburn, F.R.S. Edin. &c. Out of the many communications which you must have received in response to your invitation, some from gentlemen well qualified from practical experience to form a reliable opinion, there were some which you did not insert. But I assume, acting on your editorial judgment, that the two letters you printed—the only letters that referred to me by name—were fairly representative of your correspondents, placing before the profession the general sense of their experience. Those letters were confirmatory of my position. Mr. Pugin Thornton of Canterbury (THE LANCET, Jan. 30th, 1892, page 279), a well-known medical author, a valued contributor to Sir Richard Quain's Dictionary of Medicine, and a man of ripe experience and acute observation, says: "During this epidemic I have used nothing else but bicarbonate of potash, giving it, as recommended by Mr. Crerar, in half-drachm doses in milk every three hours as long as the fever lasted. Last epidemic I gave salicylate of soda with bromide of ammonium, after an injection of apomorphia or an aperient, *and the bicarbonate treatment I find by far the best.*" This was not "during the *decline of the epidemic*," as asserted in your summary of Dec. 31st, 1892, but during the whole of the second epidemic from its commencement up to that date; and Mr. Thornton draws a careful comparison between my treatment and the accredited treatment previously used, entirely to my advantage. I needed not Mr. Thornton's testimony, valuable as it is, to establish my contention:

> "It only serves to thicken other proofs
> That do demonstrate (by no means) thinly."

To any person reasonably open to conviction the evidence already placed before the profession is quite conclusive. I further affirm most emphatically that it was in severe cases and in the acute stages of the epidemic that the value of my treatment was most conspicuous. Also let me not be misapprehended. The patient ought to be under the care of his physician, who will adopt the usual precautionary measures in such cases; but the bicarbonate will be his sheet-anchor. Furthermore, as I intend when leisure serves to write a monograph on this subject, in which my views on the etiology, pathology and treatment of influenza will be fully expressed, unfettered by the limitations necessarily imposed on an article in a weekly journal, I will not trespass further on your valuable space. Meantime, as I have been singled out in your 'Annus Medicus for a thinly-veiled attack, I have confidence that you will in common fairness give me the opportunity of defending myself by inserting this *apologia pro medicina mea.*

I am, Sirs, yours truly,

JOHN CRERAR, M.R.C.P. Edin.

*** We have been compelled to abbreviate Mr. Crerar's letter, but we think he is mistaken in supposing that we have received many communications on this subject. To the best of our recollection the letters referred to by him as being inserted in our columns were all that were received by us. We might also point out that the summary to which he takes exception refers to the year 1892 and not 1891, when he first drew attention to the efficacy of bicarbonate of potash in influenza. He must know that many other drugs have been alleged to be of specific action in this disease by other writers in this country and abroad. We shall await his projected monograph with interest.—ED. L.

THE TEACHING OF THERAPEUTICS AT GLASGOW.

To the Editors of THE LANCET.

SIRS,—At the last meeting of the Glasgow University Students' Representative Council Mr. de Hyde-Wytt submitted the following motion: "That in view of the change in the Medical Ordinance—which now reads Materia Medica and Therapeutics instead of the old reading, Materia Medica and Pharmacy—that a deputation wait upon the Senate requesting them to ask the managers and directors of the Western Infirmary to place wards at the disposal of the Professor of Materia Medica and Therapeutics in the University of Glasgow in order that he may be able to give full and proper instruction in that most highly important of the medical sciences—therapeutics, the art and science of healing." This was carried unanimously and referred to the Grand Committee in Medicine to take proper steps. As the result the latter body elected a deputation which will wait upon the Senate as soon as possible and ask their coöperation in rectifying the anomalous state of affairs which obtains: that Dr. M. Charteris, the Professor of Materia Medica and Therapeutics, having no wards at his disposition, can only teach therapeutics in the lecture room. This is preposterous for this subject is pre-eminently a practical one. When the

new buildings connected with the Royal Infirmary, Aberdeen, are completed Professor Cash, the Teacher of Materia Medica and Therapeutics in the University of Aberdeen, is to have wards handed over to him. This demonstrates that the Aberdeen medical faculty is alive to its interests, and Glasgow University will soon, perhaps, be the only great medical school in the kingdom so ingloriously unique in its abnormity as regards therapeutics.

I am, Sirs, your obedient servant,

JAMES W. CLELAND, Hon. Sec.

Glasgow University Students' Representative Council, Jan. 10th, 1893.

HOSPITALS AS CENTRES OF STUDY.

To the Editors of THE LANCET.

SIRS,—We have throughout England many towns containing hospitals to which are attached post-mortem rooms. Grouped round each hospital as a centre are town and suburban practices, the principals of which are appointed officers of the hospital. Outside these come groups of country practices. It would be a great boon to practitioners and the public also if more use could be made of these hospitals as centres of study, especially as regards surgery. It would cost but little trouble to arrange courses of operative surgery on the dead body if clinical societies of the various towns would take up the matter. The chief obstacle would be public opinion, and I believe that great and influential organs like THE LANCET could, if they thought fit, educate public started by itself the public of that district would probably opinion. If many centres agreed simultaneously to take up the matter much good might be done. But if only one centre make up what it calls its mind and stamp out an honest endeavour to improve the skill and worth of its own medical advisers. Hoping that some of your readers may express an opinion on this idea, I remain, Sirs, yours truly,

Jan. 8th, 1893. L.R.C.P., M.R.C.S.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Hospital Sunday.

LAST Sunday was the twenty-third anniversary of Hospital Sunday in Liverpool, the first being observed on Jan. 8th, 1871. The second Sunday in the year was after due consideration agreed upon by the local clergy and ministers as the day on which the collections should be made. For the first few years the weather on Hospital Sunday was remarkably good and the collections realised sums rising from £4685 in 1871 to £8848 in 1874. This was the maximum sum raised in church and chapel collections, the following years showing fluctuations, whether owing to the inclement weather or to the depression of trade, or to both, it would be difficult to say. But the fact remains that the lowest sum raised by this means since 1874 was £6029 in 1887, which gradually improved to £6973 in 1891. Last year there was again a falling off and great efforts have been made to prevent its repetition this year. The weather was most inclement, but while some of the collections show a decrease, an almost equal number show an increase over the sum collected last year. The mayor, Mr. R. D. Holt, attended in state the Renshaw-street Unitarian Chapel, of which congregation he has been a member for many years past. After an eloquent sermon by the Rev. J. P. Jacks a collection was made which amounted to the munificent sum of £709 9*s.* 8*d.* Many other handsome collections are announced, but it would be premature to attempt any estimate of the total at present.

Action against a Café Company.

In October last a case was before the Court of Passage in which the plaintiff, an inspector of agents in a life insurance company, sued the representatives of the Clerks' Café Company for compensation for illness alleged to be caused by the defendants supplying him with bad food at the Economic Café. The jury disagreed, in consequence of which the case was again heard on the 5th and 6th inst. The plaintiff partook of curried steak and stewed rhubarb on June 27th, 1892. He was immediately seized with violent vomiting and diarrhœa and felt strange in his head. From this date till Sept. 5th no solid food would stay on his stomach. During all this time he was under medical treatment and lost about three stones in weight. On his behalf medical evidence was given to the effect that the symptoms might be due to putrid meat. For the defence it was contended that none but wholesome meat was supplied to the defendants' cafés, of which they had eight. Medical evidence given for the defendants was to the effect that the symptoms occurred too rapidly to be the result of eating putrid meat. The jury returned a verdict for the defendants.

Small-pox and Revaccination.

Although small-pox prevails both in Manchester and Warrington, between both of which towns and Liverpool there is constant communication, the disease has not made any advance here, any cases that may occur being promptly removed to hospital. The prosecution of the two women (noticed in a previous letter) for concealing the disease has had a very wholesome effect in not only deterring others from doing the same, but in showing all the advantage of working with, not against, the sanitary officers. The select committee who regulate the affairs of the parish of Liverpool afford every facility to those who desire to be revaccinated.

Insanitary Property in Liverpool.

On the 7th inst. Mr. Walton, Q.C., M.P., the arbitrator appointed by the Local Government Board to consider the claims for compensation made in regard to property which had been declared to be insanitary, concluded his inquiry. As a proof of the propriety of "presenting" the property in question, it may be mentioned that one man claimed in respect of twelve houses in two courts of two streets. The property was freehold and comprised 575 square yards. It was alleged to be insanitary because of the absence of water-closet accommodation, but the claimant contended that this difficulty could be got over by means of structural alterations. The gross rental was given as £95 and the net rental as £46, but the claimant declined to produce his rent-book. Dr. Taylor, medical officer of health for Liverpool, Dr. Hope, assistant medical officer of health, and Dr. Littlejohn of Edinburgh had all condemned the houses as insanitary and as incapable of being made sanitary. The arbitrator's award will be forwarded to the town clerk.

Taking the Oath with Uplifted Hand.

A copy of the resolutions passed at the last ordinary meeting of the Liverpool Medical Institution is published in each of the three local daily papers. One of them, the *Liverpool Mercury*, warmly encourages the new mode of oath-taking, and suggests that all similar organisations of the faculty should follow the example set by the Liverpool Medical Institution. At the trial in the Court of Passage mentioned above the first medical witness, Dr. Smart, declined the book and claimed to be sworn with uplifted hand, which was at once done. His example was followed by all the other medical witnesses, Drs. Nisbet and Hushy, Professor Paul, Drs. Mann and Taylor, and Mr. Vacher. These gentlemen deserve great credit for giving such prompt effect to the resolutions alluded to, and it is now to be hoped that the practice of kissing the book will rapidly become a thing of the past.

January 11th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Small-pox in the Northern Counties.

THE introduction of small-pox by tramps and casuals is giving our authorities much concern. Cases have occurred and have spread in this way at Sunderland and Newcastle workhouses. In Durham city, too, cases have been reported and, indeed, all over the county of Durham the disease has got a footing.

Lecture on Pedigrees by Professor Milnes Marshall.

Dr. Milnes Marshall, Professor of Zoology in Owens College, Manchester, delivered an admirable lecture in Newcastle this week on Pedigrees. He illustrated some of his theories by familiar animals, such as the horse, which he said is descended from a prehistoric animal with five fingers or toes on each leg, now represented by the hoof, but the splints, he said, were the representatives of the four other toes which had disappeared, but were still shown in fossil equine animals.

The Bowes Museum at Barnard Castle.

I am sorry to say that at a meeting of the trustees and executors of the will of Benoite Josephine Bowes, Countess of Montalto, held lately, they decided to close the splendid museum and park at Barnard Castle to the public, except

under certain limitations and by ticket. These restrictions have become necessary by the action of the Charity Commissioners refusing an adequate amount to support the museum; and pending the winding up of the estate of the late Mr. John Bowes, who was the husband of the Countess of Montalto, the donor of the museum, this is to be the more regretted as there is stated to be sufficient from the estate when wound up to carry out the full intentions of the benefactors.

Carlisle.

Last week the usual ball in aid of the Cumberland Infirmary was held in the County Hall, Carlisle. It is two years since the last infirmary ball was held, as the one arranged for last year had to be abandoned owing to the death of Bishop Goodwin. However, last week's festivity seems to have been a great success, as over 250 tickets were taken and it was attended by most of the county families.—At the last meeting of the Carlisle Sanitary Authority a letter was read from Dr. Lediard pointing out the prevalence of diphtheria and its connexion with what Dr. Lediard describes as the filthiest spot in their city, which, he further says, is in the very centre of Carlisle, and he thinks that there is probably not a single member of the Health Committee who was aware that such a dangerous state of matters existed.

Shocking Accident from an Explosion.

On Friday last a shocking accident happened from an explosion at Stanhope, county Durham. A man was carrying a pound of nitro-gelatine from the town of Stanhope to the quarry where he worked when it exploded, blowing off both his hands and otherwise injuring him. He was attended by Dr. Livingstone, but died the next day.

Death from Chronic Lead Poisoning.

A death is reported as having taken place at Jarrow from lead poisoning in a workman aged forty who had been employed as a separator for the past sixteen years. The medical evidence at the inquest was clear as to the cause of death. I have frequently recorded fatalities from lead in the cases of female workers, but very rarely in workmen.

Newcastle-on-Tyne, Jan. 11th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

The Prevention of Waste of Water in Edinburgh.

A DRAFT REPORT by the engineers of the Edinburgh Water Trust was submitted to a meeting of the Trust held on Monday. Three districts have been placed under fixed Deacon meters, twelve under Siemens's meters, and twenty-six have been laid out and provided with travelling Deacon meters. In connexion with the travelling Deacon meters during the month of November the inspectors sounded 2488 stopcocks, of which number 578 allowed the water to pass during the night. Examining the house fittings supplied by these stopcocks there were found 15 leaden service pipes which had burst, 368 wasting ballcocks, 230 wasting water-closets and 130 wasting taps. With regard to the pressure-relieving tanks which had been introduced, the consumption of water had perceptibly decreased during the time they had been in operation. The general conclusion arrived at is that faulty ballcocks are the chief cause of the waste, and that until these are replaced by others of a stronger pattern it will not be possible to effect any material reduction in the consumption of water. To carry out the suggestions of the engineers it is proposed that fifty fixed Deacon meters be ordered. It is mentioned that between 1887 and 1892 the consumption per head decreased from 44 gallons to 39½ gallons. During the last few months, as the result of more rigid inspection of waste and the introduction of pressure-relieving tanks, the consumption has fallen to 37 gallons per head—that is, 5 gallons less than in 1889, when night inspection was commenced.

Edinburgh Royal Infirmary.

Surgeon-General Lithgow has entered upon his duties as Superintendent of the Edinburgh Royal Infirmary, in succession to the late Mr. Fasson.

Cookery Demonstrations to Medical Students.

As has been the practice for some years past a course of demonstrations of sick-room cookery is being given to medical students in one of the theatres of the Edinburgh Royal Infirmary. The course commenced on Saturday last.

Health of Edinburgh.

The mortality last week was 142, making the death-rate 28 per 1000. Diseases of the chest accounted for 75 deaths and zymotic diseases for 29, of which 1 was due to typhoid fever, 4 to scarlet fever, 23 to measles and 1 to whooping-cough. The intimations for the week were: Typhoid fever 4, diphtheria 3, scarlet fever 56 and measles 263.

The Leith Local Authority and a Local Practitioner.

A correspondence has passed between the Public Health Committee of the Leith Town Council and one of the practitioners in the burgh regarding a case of measles said to have occurred in a milk-shop. He was asked if he had told the keeper of the shop that there was no necessity for shutting the shop. The doctor has absolutely declined to be drawn on the subject, reminding them that he is not compelled to report infectious diseases and that he could not recognise instructions from the committee as he is not an official or subordinate of the committee, and that he did not discuss matters concerning his patients with any public or private body. The local authority are getting driven into a corner and the sooner they yield to the inevitable the better. The action of the medical man in declining to give information is a logical sequence to the action of the local authority and is supported by the law and custom of the profession.

Health of Leith.

There were 40 deaths in Leith last week, making the mortality 29·70 per 1000, which is a considerable fall compared with the preceding weeks. Of the deaths, 2 were from scarlet fever, 1 from diphtheria, 5 from measles and 1 from whooping-cough.

Health of Aberdeen.

The following is the return of zymotic diseases notified last week:—Measles, 51; scarlet fever, 9; diphtheria, 3; whooping-cough, 3; puerperal fever, 1: total cases, 67. The epidemic of measles continues rapidly to decline, the number of cases for the last five weeks being 263, 184, 147, 106 and 51 respectively. In October, November and December, 1892, the total number of cases of measles was 4358, with 98 deaths in the first two months.

Aberdeen Hospital Sunday.

On Jan. 1st the offertories of many churches were devoted to the maintenance of the Aberdeen Royal Infirmary. Despite the inclement weather a good sum was collected—£725, being £24 less than last year. It is hoped that the deficiency will yet be made good.

January 10th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Poor-law Relief.

FROM a return recently issued by the Local Government Board it appears that the total number of persons who received relief in 1892 amounted to 427,934, showing a decrease of 9954 as compared with 1891. Of these 308,435 received in-door relief and 119,499 out-door relief. The total expenditure under all heads was £1,402,919, compared with £1,405,305 in the previous year.

Cholera Hospital, Cork.

The Cork guardians have adopted the plans sent by the Local Government Board for a cholera hospital in the grounds of the workhouse. The hospital will accommodate thirty patients and will be commenced as soon as plans and specifications have been prepared.

Fees to Sanitary Officers.

In December last the board of guardians of the Cork Union adopted a motion proposing to discontinue the practice of paying special fees to sanitary medical officers for attendance at petty sessions in respect of sanitary matters. This proposal was not only unjust but manifestly illegal, and the Local Government Board, on being appealed to, pointed out that Section 258 of the Public Health Act, 1878, enables a sanitary authority to arrange with a candidate for the office of medical officer before appointment that the duty of attendance and affording assistance at sanitary prosecutions shall be included in his salary, but that under other circumstances there is no power to enforce the arrangement contemplated in their notice of motion.

Rathdown Union.

The guardians of this union have elected Dr. O'Flaherty

and Mr. Newland superintendent medical officers under the cholera regulations for this union.

Children's Hospital, Dublin.

A new juvenile comedy operetta will be performed at the theatre attached to the hospital in Harcourt-street in aid of the funds of the institution on the 21st inst. The play will be "Cinderella" and the chorus will include thirty children.

Sir Charles Cameron of Dublin has been elected President of the Public Analysts' Society of Great Britain and Ireland.

Dr. Thomas Myles has been appointed by the Treasury Medical Referee for Ireland in connexion with the Civil Service and superannuations.

The Belfast Health Society.

The new Health Society was very successfully inaugurated on Jan. 4th, when at a public meeting Dr. Whittaker, medical officer of health for the city of Belfast, delivered a lecture on "Sanitary Science." The President of Queen's College, Dr. Hamilton, who as President of the Health Society occupied the chair, pointed out that Mulhall's statistics for 1861–80 showed that Ireland was the healthiest country in Europe. In Hungary the death-rate is 38 per 1000 per annum, in Austria 30, Italy and Spain 29, Belgium 22, England 21, Scotland 21, Denmark and Sweden 19, Ireland 17. But while this fact is true in regard to Ireland as a whole, unfortunately the large towns of Ireland, Belfast amongst the number, are among the unhealthiest in the United Kingdom. In Birmingham the death-rate is 19 per 1000, in London 21, in Glasgow 25, in Liverpool and Cork 26, in Dublin 27, and in Belfast (the worst of all) 28. In his lecture Dr. Whittaker showed the great prevalence of phthisis in Belfast (1017 died from this cause in 1891 and 1082 in 1892) and he said that the preventable causes of disease existing in this city were—(1) the unhealthy occupation of many of the working classes; (2) the presence in the backyards of thousands of the houses of the working classes of middens of the worst possible type; (3) the bad sanitary conditions in far too many of the workers' houses; and (4) the imperfect drainage of the houses into the sewers. A very important statement was made by one of the speakers at the meeting—Mr. Thomas Harrison, a member of the Public Health Committee of the Belfast Corporation. He said all the efforts of that Society would be of little avail unless they and the public could get the Infectious Diseases Notification Act introduced into Belfast at the very earliest opportunity. At present Dr. Whittaker (the public officer of health) and his large and efficient staff know nothing of the march of disease through their town. They must not, Mr. Harrison said, blame either the Public Health Committee or the Legislature; the Belfast Corporation refused to pass a resolution in favour of the adoption of the Act. Even so late as Monday, Jan. 2nd, 1893, another attempt to get the Act introduced was unsuccessful. He called upon the Medical Society of Belfast and upon the newly organised and newly established Health Society to assist the Public Health Committee, even against the corporation itself, to get that Act introduced into Belfast. There is no doubt that this new society (the inception of which is entirely due to the ceaseless energies of the hon. secretary, Dr. H. O'Neill) will do an immense deal of good, especially in educating the citizens as to the laws of health, and already, by the attention it has drawn to the very high death-rate of Belfast, it has accomplished no small end.

Jan. 10th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Revival of an Ancient Remedy for Phylloxera.

ON April 11th last M. de Mély called the attention of the members of the Académie des Sciences to book vii., chap. viii., of Strabo's Geography, wherein mention is made of an insect or parasite—perhaps our own phylloxera—which already at that remote period, 60 B.C., attacked the vine. Roughly translated the passage runs as follows:—"The Apollionates have in their territory a rock which vomits fire; from its base there escape springs of tepid water and asphalte, the result, apparently, of the combustion of the soil, which is bituminous, as is proved by the presence on a hillock close by of an asphalte mine. In this mine the loss seems to be balanced by fresh deposits derived from the soil thrown in, which is converted, according to Posidonius, into bitumen. The same author mentions another bituminous earth, ampelitis, which is extracted from a mine in the neighbourhood of Seleucia and which is employed as a preservative against the insect that attacks the vine. The mere rubbing of the vine with a mixture of the earth and oil suffices to kill the animal before it can ascend from the roots to the buds. Posidonius adds that when he was Prytanis of Rhodes there was found there a similar earth, which, however, required more oil than the above (ampelitis)." M. de Mély has since conducted experiments on a large scale in order to put Strabo's assertion to the proof. Six hundred vine-stocks, planted on land impossible to sulphur, were treated with 100 kilogrammes of chopped rags saturated with ten kilogrammes of schist. M. de Mély has in addition treated some vines with bituminous earth sent him from Rhodes, the earth being placed in circular buckets around the vine stock. The result is said to be most gratifying, the vines subjected to the Strabonian treatment being remarkably vigorous and the yield of grapes greatly superior to that of neighbouring vines untreated thus. M. de Mély suggests that the method should be put into practice throughout all phylloxera infested districts, the moderate cost of the remedy bringing it within the reach of even the poorest wine-grower.

Remarkable Transposition of Organs.

Some days ago there died in Paris, under what appeared to be suspicious circumstances, a gentleman of independent means aged eighty-five. A necropsy was deemed necessary, and Dr. Descouts, the well-known Morgue expert, was entrusted with the task. No abnormal cause of death was discovered; but Molière's famous *Médecin, malgré lui*, could he have been present on the occasion, would have been gratified to find his peculiar topographical notions confirmed in a striking manner. The heart, liver and spleen were completely transposed, the first-named organ being on the right side of the chest and so on. Commenting on this strange abnormality, Dr. Descouts remarks on its rarity. He further says that he would like to know how many errors of diagnosis have been committed by the different practitioners who were consulted by the defunct during his long life. Asked if it would not be as well to interrogate the deceased's ordinary medical attendant, Dr. Descouts humorously replied that it was most unlikely that he had ever had one and that that was probably the reason he had lived so long! Dr. Descouts has evidently studied Molière to some purpose.

The new Medico-legal Institute.

Anyone who, like myself, has followed a series of summer lectures at the Morgue will not readily forget the suffering entailed on the students by the sweltering heat prevailing in the wretched little theatre in which post-mortem examinations are performed by a volunteer from amongst the audience. The teaching is so excellent that both Professor Brouardel and his assistants and the Faculty students deserve to be provided at an early date with more appropriate premises. The construction of a new Medico-legal Institute has for some time past been on the *tapis*, and it is now announced that the discussion of the project will be definitely undertaken by the Conseil Général du Département de la Seine in February next. Fortunately for the chances of the prompt realisation of the scheme Professor Brouardel possesses great influence, which he will doubtless employ in this direction.

January 11th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Emperor and Empress Frederick Children's Hospital.

THE Emperor and Empress Frederick Children's Hospital in the Reinickendorfer Strasse here, of which the Empress Frederick is patroness, is an institution for the treatment of sick children, especially such as are suffering from infectious diseases. It was founded and is maintained mainly by beneficent donations. The hospital consists of four departments, one for non-infectious internal diseases, another for surgical cases, a third for diphtheria, and a fourth for scarlet fever. The doctors and attendants are as strictly isolated in the several departments as if they did not belong to a uniformly governed institution. Other departments for measles, whooping-cough and mixed forms of infectious diseases are projected. The institution was opened on Aug. 1st, 1890, and then consisted only of the consulting and diphtheria departments. During the first year 434

children were treated in the hospital, including 242 suffering from diphtheria, 36 from scarlet fever and 216 from non-infectious diseases or injuries; and the total number of days spent by them in the hospital was 11,127. The number of children treated in the consulting department was 5674. Since then till the end of 1892 the corresponding numbers were 1752, 46,460 and 8000. The sum still wanted to complete the hospital is about 300,000 marks (£15,000).

Friedrich von Esmarch.

Yesterday was the seventieth birthday of the famous surgeon Professor von Esmarch. He received numerous marks of sympathy and respect. Prince and Princess Henry of Prussia and all the leading people in society at Kiel, where he lives, were amongst his congratulators. Professor Petersen delivered a festal document in the name of his pupils and admirers. The city of Kiel sent a deputation with the burgomaster at its head. The congratulations of the University were conveyed by Professor Haeckel. The students' associations were represented by deputations. Many telegrams &c. arrived from abroad, especially from America.

Professor Eichstedt.

The death of Professor Eichstedt, the oldest member of the medical faculty of the University of Greifswald in Pomerania, is announced from there. He was a many-sided medical writer. Some of the subjects on which he wrote were diarrhœa in children, procreation and the mechanism of labour, acarus scabiei, and pityriasis versicolor. He was born and educated at Greifswald, and spent most of his life there.

Dr. Lion Hollstein.

Privy Sanitary Counsellor Dr. Lion Hollstein died two or three days ago aged eighty-one. He spent sixty years of his life in Berlin. He was the author of a "Manual of Anatomy," which was the first, or one of the first, German books of the kind which followed the English example of inserting illustrations in the text. It went through five editions, was translated into foreign languages and was very popular amongst medical students till about twenty years ago.

Cholera in Hamburg.

About six cases of cholera occurred in Hamburg last week.

Professor Hitzig.

Eduard Hitzig, Professor of the Science of the Treatment of the Insane at Halle, has received and declined a call to succeed Professor Theodor Meynert in Vienna.

January 10th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Cholera in Austria-Hungary.

No case of cholera has been reported from the Galician towns, but a new invasion of the epidemic is feared in the Bukowina on account of the rapid spread of the disease in the adjacent part of Russia. The traffic on the frontier is, therefore, kept under medical supervision. A case of cholera has occurred at Budapest to-day, but the number of the patients at the Cholera Hospital has been reduced to two.

The Intra-peritoneal Insufflation of Air in Tuberculous Peritonitis.

The astonishing curative effect of simple laparotomy is well known from the publications of Professor Cheyne as also from those of Continental surgeons, and various hypotheses have been advanced to explain it. Now Professor Mosetig-Moorhof, in a recent communication, is inclined to believe that the curative influence of laparotomy in tuberculous peritonitis is due, as was originally suggested by Caspersohn, to the irritation caused by the entrance of air into the peritoneal cavity. His attention was called to this fact in a case of tuberculous growths of the peritoneum in a woman aged forty-two, on whom laparotomy had been performed merely for the purpose of diagnosis, and in whom three weeks after the incision of the abdominal wall the growth was reduced from the size of a child's head to that of an apple without any further interference. In May, 1892, Professor Mosetig had the opportunity of trying a new method of treatment based on this experience. In a boy four years of age, with ascites, hydrocele of the cord and tuberculous induration of the epididymis and of the vas efferens, the tuberculous testicle was removed, and by introducing a drainage-tube through the tunica vaginalis and the inguinal canal the ascites was drained off, 1700 cc. of liquid containing albumen being discharged. Then air, sterilised by passing it through a solution of warm carbolic acid and again through layers of cotton-wool which dried it, was insufflated into the peritoneal cavity through the drainage-tube. The ascites disappeared, the boy quickly recovered, and in October the abdomen was, on percussion, found to be normal when the patient was again seen by the surgeon. From these facts Professor Mosetig was induced to recommend paracentesis abdominis with subsequent insufflation of air in cases of tuberculous peritonitis associated with ascites, in place of the laparotomy heretofore performed in such cases.

The Value of Different Antiseptics in the Surgery of the Brain.

By recent experiments of Professor Adamkiewicz it would appear that some of the antiseptics used in surgery should not be applied to wounds of the brain, as they are irritating to, or even destructive of, the nervous tissues. Carbolic acid, for example, should not be used in stronger solutions than 0·5 per cent., while corrosive sublimate should be altogether avoided. Boric acid alone is freely applicable to the brain without evil consequences.

Forensic Medicine in Vienna.

There were not less than 1108 post-mortem examinations made in Vienna at the Institute for Forensic Medicine in the course of last year, a number greatly in excess of the necropsies performed at other universities.

Vienna, Jan. 2nd.

Obituary.

ROWLAND SMITH M.R.C.S., L.S.A.

ONE of the rank and file of our profession passed away somewhat suddenly at Cobham, Surrey, on Monday, Jan. 2nd. Mr. Smith belonged to the class of general practitioners, whose services to the sick and ailing of the community are for the most part confined to the sick. For between thirty and forty years he held offices at the above-mentioned town under the Poor-law, his ministrations in the course of his official duties being concurrently sought also by his neighbours in the easier walks of life. The severe weather with which we have been visited of late, together with the exposure necessarily attendant on his professional duties, seems to have brought on an attack of pneumonia to which he speedily succumbed. The esteem in which he was held by his neighbours as well as by his patients was shown by the deceased being honoured by a public funeral. He leaves six sons and two daughters to mourn their loss.

JAMES ALLEN BRATTON, M.A.CANTAB., L.R.C.P.LOND., M.R.C.S. ENG.

MR. J. A. BRATTON died at Ewell, near Epsom, on Monday the 9th inst., of enteric fever, after an illness of five weeks' duration. During the night of Sunday symptoms of pneumonia, involving the whole of the right lung, supervened, and he rapidly sank. He was the son of the late Mr. James Bratton, F.R.C.S., a well-known surgeon, who practised for nearly fifty years in Shrewsbury. Mr. J. A. Bratton was educated at Caius College, Cambridge, and at King's College, London, and at first practised in Shrewsbury, where he became assistant surgeon to the Shropshire Eye, Ear and Throat Hospital and honorary secretary and treasurer to the local branch of the British Medical Association. In 1890, wishing to be nearer London, he joined Dr. Barnes of Ewell in partnership, and on the death of his partner last year he took over the whole of the practice. He was a thoroughly able practitioner, most courteous and agreeable in manner, kind and genial in disposition, and he readily won and retained the confidence and esteem of his patients. He died at the early age of thirty-two and his loss will be severely felt by a large circle of patients and friends. He leaves a widow and one child to mourn his death. His body was cremated at the Woking Crematorium on Thursday, the 12th inst., according to his expressed desire.

DR. RAFFAELE D'ARPE.

THE picturesque and historically most interesting Apulian town of Lecce has just lost its noblest citizen, the nonagenarian Dr. Raffaele D'Arpe. Seventy years ago he was

one of the most promising graduates of the Neapolitan school, but he had barely entered in practice when the patriotic movement in the peninsula absorbed his time and energies. The upheavals of 1821 and 1831 found him actively aiding the national cause and, after their subsidence, utilising much of his leisure in preparing for the next and, temporarily, more effective one in 1848. By this time long years of steady practice and study had made him one of the most successful consultants in Italia Meridionale, in which capacity he was especially useful to the patriots confined after that memorable uprising in the prisons of Lecce. Among these were some of the most noted martyrs of the South—the Duca Castromediano, the Senator Schiavoni, the Signori Stampacchia, Sansovito, Bortone and others—all of whom owed to his courageous and kindly visits not only the treatment which prolonged their lives but the mental satisfaction of knowing how their brethren were faring at other centres of the national movement. At last the Neapolitan Government ventured to put him also under arrest and he served his time in the dungeons of Lecce till the temporary return of peace set him at liberty. Once more the agitation against the Bourbon in 1859 found him on the nationalist side. With the absorption of the Two Sicilies into the Italian kingdom in 1860 Dr. D'Arpe became Mayor (*Sindaco*) of Lecce and held the post with much acceptance for many years. Though in exceptionally good circumstances, he laboured professionally to the last, principally among the poor. By these, and indeed by all the inhabitants of the town and province, his death is mourned as a public calamity. On the day of his funeral—a most touchingly impressive one—the schools, the shops, the places of business resort were closed in order that the citizens of every class and condition might pay their last tribute of respect to one who had served them so unwearyingly and so well.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY MEETING of the Council of the Royal College of Surgeons was held on the 12th of January, the President, Mr. Thomas Bryant in the chair.

With the exception of a resolution relating to a candidate for the dental diploma the minutes of the Ordinary Council on the 8th ult. were read and confirmed.

The Secretary reported the death, on the 18th ult., of Sir Richard Owen, K.C.B., F.R.S., Senior Fellow of the College and late Conservator of the Museum of the College, and the Council expressed their deep regret at his death and their sincere sympathy with the members of his family.

It was agreed that, as recommended by the Museum Committee, Mr. E. Burgess, the museum artist, should be employed for a further period of six months; that Dr. T. Colcott Fox and Dr. H. Radcliffe Crocker should be requested to rearrange the models and drawings in possession of the College and to prepare a new catalogue; and that, as recommended by the Museum Committee, the sum of £15 should be expended in the purchase of 108 Brazilian birds preserved in spirit. A report, dated Dec. 19th, 1892, from the Committee of Management was approved, adopted and entered on the minutes; a report, dated Dec. 9th, 1892, from the Laboratories Committee, was also approved, adopted and entered on the minutes. Dr. German Sims Woodhead was re-elected Director of the Laboratories for the ensuing year.

It was agreed that, as recommended by the President and Vice-Presidents, the Royal Horticultural Society should be informed, in reply to their letter of the 30th ult., that the President and Vice-Presidents will be prepared to sign, on behalf of the Council, any memorial that may be presented by them to the London County Council asking them to undertake an inquiry into the origin and composition of London fogs and the possibility of a remedy for the same.

The Secretary reported the receipt of a dissertation on "Diseases of the Ovaries and the Uterine Appendages: their Pathology, Diagnosis and Treatment," the subject of the Jacksonian Prize for the past year.

The motion brought forward by Mr. Smith was agreed to; it was as follows:—

"That in order to ascertain the views of the Fellows and Members of the College on the position which, in their opinion, this College should hold in the proposed Teaching University for London, separate meetings of Fellows and Members be convened at an early date after the report of the Gresham Royal Commission has been made public."

Mr. Tweedy obtained the permission of the Council to withdraw the motion, of which he had given notice on the 8th ult.

A communication was received from Sir Francis Knollys announcing the intention of his Royal Highness the Prince of Wales to honour the College with his presence at the Hunterian Oration on Feb. 14th next. The oration will be delivered in the theatre of the College by Mr. Thomas Bryant.

MEDICAL TRIAL.

MEDICAL PRACTITIONERS' ACCOUNTS.

A CASE was recently tried at the Greenwich County Court, before Judge Bristowe, Q.C., and a jury, in which the plaintiff, Dr. Groome of New Cross, sued the son of a patient, formerly living at Streatham, for the recovery of £50 for medical attendance on the deceased. From the evidence it appeared that in November, 1890, the defendant's sister called at the plaintiff's surgery and produced a letter from the defendant to her by which she was asked to procure for her father such medical attendance as he required. Upon the faith of this letter the plaintiff attended the patient for a period of thirteen months, when he died. Shortly after the death the plaintiff sent in his account, made out to the executors of the deceased, which account was sent by the defendant's sister to him, and some correspondence took place between the plaintiff and the defendant with regard to the payment of the claim. The defendant did not deny his liability, but, on the other hand, there was no express admission of it. Whilst this controversy was taking place the defendant's sister died, and thus a further complication was introduced into the matter. At last the plaintiff, being unable to obtain payment, commenced this action. The vital point in the case was to establish the defendant's liability, and the proof of this was dependent on a letter of the deceased to the sister, which letter, however, was not forthcoming. After evidence to sustain the points brought forward on either side had been given the judge, in summing up, commented on the negligence displayed by medical practitioners generally in regard to the delivery of their accounts for professional attendance, and the jury found a verdict for the plaintiff for the full amount, with costs.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in Anatomy and Physiology at a meeting of the Examiners on the 9th inst.:—

George A. Copland, William Butement and William L. Christie, students of Otago University, New Zealand, and London Hospital; William H. G. Aspland, London Hospital; Harry G. Cribb and Arthur S. Lawrence, of Middlesex Hospital; John. W. Maskell, of University College, Liverpool; Ernest J. Beards, of Mason's College, Birmingham; Thomas E. Price, of Mason's College, Birmingham and Mr. Cooke's School of Anatomy and Physiology; Joseph Galizia, of the University of Malta; Naoroji Beramji Darabseth, of Grant Medical College, Bombay, and Aberdeen University; John M. K. Grover, of Owens College, Manchester; James H. Ferguson, of Ledwich Medical School and the Catholic University, Dublin; Thomas G. D. Cooper, of Queen's College, Cork, and Wilfred F. Evans, of St. Bartholomew's Hospital.

Anatomy only.—Herbert Hallam, Ernest D. Warren, and Cyril H. Flory, of the Medical School, Sheffield; Stanley W. Williams and Arthur T. Jones, of University College, Liverpool; Charles H. Smart, of Mason's College, Birmingham; Thomas Jones and Edward Fielden, of Owens College, Manchester; Alfred E. Sears, of London Hospital and Henry A. Burridge, of King's College.

Physiology only.—Arthur E. Little and Arthur T. Latchmore, of Yorkshire College, Leeds; Ernest H. Milson, of St. Mary's Hospital; Richard E W. Jennings, of the Medical School, Bristol, and Mr. Cooke's School of Anatomy and Physiology; Thomas T. Harratt, of Middlesex Hospital; Edwin Folliott, of St. Bartholomew's Hospital; William Chapman and William H. Tomlinson, of Owens College, Manchester; Arthur Cant and William Sutcliffe, of Mason's College, Birmingham.—4 candidates were referred in both subjects, 6 in Anatomy only, and 12 in Physiology only.

Passed on the 10th inst.:—

Anatomy and Physiology.—Arthur Marriott, Thomas H. C. Stevenson and John H. Cook, of University College; George H. Hunt, of St. Mary's Hospital; Thomas H. Boyd, of Melbourne University; Frederick D. S. Fayrer, of Cambridge University and Charing Cross Hospital; Arthur H. H. Huckle, Walter C. Pakes, of Guy's Hospital; Charles B. Statham, of Grant Medical College, Bombay, and Guy's Hospital; Ernest W. H. Groves and Frank A. Smith, of St. Bartholomew's Hospital; William H. Kenrick, of London

Hospital; Arthur J. Eastcott and Edward L. Hunt, of St. George's Hospital; Herbert C. Crouch, of St. Thomas's Hospital; Reginald Moreton, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology; Usher W. N. Miles, of King's College; Hugh P. Noble, of Middlesex Hospital.

Anatomy only.—John P. Prell, of London Hospital.

Physiology only.—Denyer W. F. Latham and Charles F. Le Sage, of London Hospital; Herbert J. Richard and Bernard W. Holmes, of St. Bartholomew's Hospital; Oguntola Sapara, of St. Thomas's Hospital; William D. Watson and Edgar T. Inkson, of University College; and Christopher A. A. Coulthard, of St. George's Hospital.—12. Candidates were referred in both subjects, 5 in Anatomy only and 4 in Physiology.

Passed on the 11th inst.:—

Anatomy and Physiology.—Hubert Rawathorne, of University College; Reginald A. L. Bill and Percy S. Crookes, of St. Thomas's Hospital; Arthur Chopping, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology; Julius Moore and Lionel A. Paul, of Guy's Hospital; Leonard A. Grimes, of St. George's Hospital and Mr. Cooke's School of Anatomy and Physiology; Spencer Wicks, of Cambridge University and London Hospital; Frederick L. Dodd, of Middlesex Hospital; James M. G. Swainson, of Westminster Hospital; John Gundlach, of St. Bartholomew's Hospital.

Anatomy only.—Frank V. Bice, William A. Bramadon, Herbert G. Berry and Thomas Martin of St. Bartholomew's Hospital; Arthur W. Robertson, of St. Bartholomew's Hospital, and Mr. Cooke's School of Anatomy and Physiology; James G. Heath, of St. Mary's Hospital; Frederick R. Baker, of London Hospital, and Mr. Cooke's School of Anatomy and Physiology; Ralph E. De Martini, of King's College.

Physiology only.—Harry R. Emms, Arthur Brebner and Frederick H. E. Anning, of University College; Lambert C. Dillon, of King's College; Michael Joseph Ryan and William H. Farmer, of St. Bartholomew's Hospital; William K. Hay-Coghlan, of St. Mary's Hospital; and Harold E. Dixon, of London Hospital.—12 candidates were referred in both subjects, 5 in Anatomy only and 8 in Physiology only.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentleman, having previously passed the necessary examinations and having conformed to the by-laws and regulations, was, at the quarterly meeting of the Council, admitted a Member of the College:—

Samuel Whitell Thompson, L.S.A.Lond., Charing-cross Hospital.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed the Primary Examination in the subjects indicated:—

Chemistry.—C. Adams, M. K. H. Holst, H. M. Maitland, W. H. Burnhill, and M. Sharp, Royal Free Hospital; T. H. P. Peers, Charing-cross Hospital.

Materia Medica, Botany and Pharmacy.—W. MacLellan, Edinburgh; J. Thornton, London Hospital.

Anatomy and Physiology.—F. H. Blatchford, Cambridge and St. Mary's Hospital; H. G. Cribb, Middlesex Hospital; H. C. F. Dalton, Charing-cross Hospital; L. C. Dillon, King's College; A. M. Dow, Yorkshire College, Leeds; A. S. Lawrence, Middlesex Hospital; C. R. Maitland, Cambridge University; C. H. R. Pentreath, Cambridge and St. Mary's Hospital; T. E. Price, Birmingham and Mr. Cooke's School of Anatomy; W. S. Robinson, Birmingham; O. C. Sibley, Middlesex Hospital.

Anatomy.—W. Alder, Guy's Hospital; L. M. Blake, Royal Free Hospital; D. L. E. Bo tor, St. Bartholomew's Hospital; G. H. Gill, Owens College; S. R. Hallam, St. Thomas's Hospital; H. G. Jones and E. S. Johnson, St. Mary's Hospital; E. S. L. Lovell, Charing-cross Hospital; A. C. M'Lean, King's College; E. D. Warren, University College and Sheffield.

Physiology.—E. B. Betts, St. Bartholomew's Hospital; A. T. Latchmore, Yorkshire College, Leeds; W. A. Montgomery, St. Thomas's Hospital; A. P. Square, Middlesex Hospital; M. A. F. Vakil, Royal Free Hospital and Bombay.

ISOLATION OF INFECTIOUS CASES AT CHEADLE.—The Cheadle Local Board have obtained the consent of the Stockport Corporation to send infectious patients to the Stockport Borough Hospital if accommodation can be found for them at that institution. The nearest place of isolation, independent of the Stockport Borough Hospital, is Hyde, which place, it is contended, is too far distant from Cheadle. Efforts have been made to erect an infectious disease hospital at Cheadle, but to that proposal the majority of the board and of the ratepayers are opposed.

HARVEIAN SOCIETY.—The annual meeting and conversazione will be held at the rooms of this Society in Tichborne-street, London, on Thursday, Jan. 19th, at 8 P.M., when an address will be given by the retiring President, Dr. Cheadle. Amongst the names of those gentlemen who have promised to exhibit pictures are Sir Henry Thompson, Mr. Propert, Dr. Buzzard and Mr. Evershed. The following officers have been nominated by the Council for 1893:—President: Mr. Malcolm Morris. Vice-Presidents: Mr. Drew, Dr. Goodhart, Mr. Lockwood and Dr. Maguire. Treasurer: Mr. Cripps Lawrence. Hon. Secs.: Mr. Roughton and Dr. Boxall. Council: Dr. Cheadle (retiring President), Dr. William Hill (retiring Secretary), Dr. Coates, Mr. Dodsworth, Dr. Evans, Dr. Gomer Davies, Mr. Rayley Owen, Mr. D'Arcy Power, Mr. Morton Smale, Sir William Roberts, Dr. Scanes Spicer and Dr. A. K. Willis.

MEDICAL FEES AND STREET ACCIDENTS.—In Glasgow the Police Commission has fixed the minimum fee for medical attendance on persons suffering from street accidents at 2*s.* 6*d.* during the day and 5*s.* during the night, the maximum payment to remain as heretofore.

FOOTBALL CASUALTIES.—On the 2nd inst. during a match at Lochmaben, a player fractured his right leg.—On the following day, while playing a match at Gleadless, a young man dislocated his right clavicle.

PRESENTATION.—Mr. F. H. Lewis, M.R.C.S., L.S.A., of Auckland, New Zealand, has been presented by the Central Nursing Class of the St. John Ambulance Association with a silver cigarette-case and match-box in recognition of his services in training the class.

TYPHUS FEVER IN NEW YORK.—Stringent measures are being adopted to curb the epidemic now prevailing in New York. Cases to the number of eighty-one have been reported since Dec. 1st, and most of them have arisen in densely populated and grossly insanitary purlieus of the city. The closing of some of the lodging-houses is in contemplation.

STRANGE CASE OF SUICIDE.—On Jan. 4th an inquest was held at Birmingham on the body of an elderly man named William Bolas. Deceased had lately attempted to commit suicide by drinking sulphate of zinc. Evidence given before the coroner showed that the unfortunate man had swallowed two pieces of cane, the one fifteen inches in length and the other sixteen inches. Death resulted from injuries to the windpipe and the jury returned a verdict of "Suicide during temporary insanity."

THE SOCIETY FOR THE STUDY OF INEBRIETY.—A meeting of the friends of this Society, which assembled at the Marlborough Rooms on the 10th inst., was distinguished by an event of unwonted interest. This was the celebration of the hundredth anniversary of one of its vice-presidents, Dr. Severin Wielobycki. Dr. Norman Kerr, surrounded on the platform by many gentlemen identified with the work of restraining intemperance, gave an interesting sketch of the career of the veteran reformer and, on behalf of the Society, presented him with an illuminated address appropriate to the occasion. Other addresses from kindred societies as well as from private persons interested in the work of temperance reform were also presented. Dr. Wielobycki, in expressing his thanks for the addresses and congratulations, remarked that in order to live a hundred years it would be necessary to abstain from alcoholic drinks and the use of tobacco and to forego over-indulgence in animal food.

PROVISION AGAINST FIRE IN HOSPITAL BUILDINGS.—Berrywood County Asylum, Northampton, is, in addition to its other fire protective arrangements, to be supplied with a powerful steam fire engine of special design. Messrs. Shand, Mason and Co. of London are the makers of the engine, which is to have a pumping capacity of 450 gallons per minute and will throw six powerful jets of water over the asylum buildings if occasion should arise. A novel feature of the engine is that it can be converted into an ordinary motive power engine at a few minutes' notice.—The Governors of Guy's Hospital recently had large additions made to the fire main and hydrant system which has for many years protected the premises against fire. Messrs. Merryweather and Sons carried out the work and recently gave one of their periodical drills to thirty-two of the night staff and six workmen, with very good results.

THE RECENT INQUIRY AT THE BIRMINGHAM WORKHOUSE INFIRMARY.—The clerk to the Birmingham Workhouse Infirmary has received from the Local Government Board their report with regard to the inquiry recently conducted by their inspectors, Mr. Murray Browne and Dr. Downes, into the circumstances connected with the death of Edwin Hawkesford at the Winsor Green Asylum in July last; also in respect of the case of Joseph Aston, a certified lunatic, whilst an inmate of the workhouse infirmary. The report gives in detail the conclusions of their inspectors regarding the circumstances attending the former case, and on the whole, whilst admitting the existence of some error of judgment in dealing with the case, agree with the report of their inspectors that no serious blame is to be attached to the officials concerned. The second case was that of an old man who suffered from a fractured sternum. Here the accident seemed to have arisen from an altercation between the deceased and another patient.

ODONTOLOGICAL SOCIETY.—At the annual general meeting of this Society, held on Jan. 9th, the following officers for the present year were duly elected:—President: Mr. W. Bowman MacLeod. Vice-Presidents: Messrs. T. H. G. Harding, R. H. Woodhouse, Morton Smale, R. T. Stack, F. H. Balkwill, W. E. Harding. Treasurer: Mr. S. J. Hutchinson. Librarian: Mr. Ashley Gibbings. Curator: Mr. Storer Bennett. Editor of Transactions: Mr. E. Lloyd-Williams. Honorary Secretaries: Messrs. W. A. Maggs (Council), Cornelius Robbins (Society), James F. Colyer (for Foreign Correspondence). Councillors: Messrs. F. J. Bennett, E. G. Betts, B. J. Bonnell, J. Ackery, A. Underwood, Harry Rose, C. D. Davis, Chas. Truman, W. R. Humby, T. S. Carter, W. S. Woodburn, W. H. Williamson, H. C. Quinby, D. W. Amoore, Wilson Hogue, G. G. Campion, J. McKno Ackland, J. H. McCall.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BEST, PALEMON, M.B. Lond., M.R.C.S., has been reappointed Medical Officer for the Grimoldby Sanitary District of the Louth Union.

BRANDT, J. EGERTON, B.A. Cantab, M.B., C.M. Edin., has been appointed House Physician to the Hertford British Hospital, Paris.

BROWN, HAYDN, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Surgeon to the Hospital of St. Peter Port, Guernsey.

COLLINS, HENRY BEALE, D.P.H., has been appointed Medical Officer of Health for Kingston-on-Thames Urban District.

DAVIES, G. A., L.R.C.P. Lond., M.R.C.S., of Newport (Mon.), has been appointed a J.P. for that Borough.

DAY, F. W. LANGSTON, M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer of Health for the Baldock District, Herts.

DUKES, Mr. ARCHIBALD, has been appointed House Surgeon to the Croydon General Hospital, vice De Mesquita, resigned.

HITCHCOCK, JAS., M.B., C.M., has been appointed Medical Officer *pro tem*, to the Gamrie Parochial Board.

LEA, J., M.B., C.M. Cantab., has been appointed House Surgeon to the Stockport Infirmary.

MAGUIRE, R., M.D., F.R.C.P. Lond., has been appointed Physician on the Honorary Staff of the Royal Society of Musicians.

MCNEILL, HARDINGE C. C., L.R.C.S., L.R.C.P., L.F.P. & S.G. Edin., has been appointed Honorary Surgeon to the Cornelia Hospital, Poole.

MILLER, W. R., M.D., B.Ch. Dub., has been appointed Surgeon to the Royal Cornwall Infirmary.

ODELL, ROBT., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer for the Second and Third Sanitary Districts of the Hertford Union.

OWEN, E., M.B. Lond., F.R.C.S., has been appointed Surgeon on the Honorary Staff of the Royal Society of Musicians.

RILEY, J. W., L.R.C.P., L.M. Edin., M.R.C.S., has been appointed Medical Officer for the Pontisbury Sanitary District of the Atcham Union.

STEPHENS, CHAS., L.R.C.S. Edin., has been appointed Medical Officer for the Fourth Sanitary District of the Brackley Union, vice Williams, resigned.

TOSSWILL, T. CECIL, M.B., C.M. Edin., has been appointed House Surgeon to the Stockport Infirmary, vice Bellamy, resigned.

VARDON, A. D., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Eastern Division of the Parish of Gamrie.

WOOD, W. D., L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer of Health for Caversham and the Combined Sanitary Rural and Urban Districts of the Bicester Union.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM AND MIDLANDS HOSPITAL FOR WOMEN.—Vacancy in the Honorary Acting Out-patient Staff.

CORPORATION OF NORWICH.—Medical Officer of Health. Salary £400 per annum.

COUNTY ASYLUM, Prestwich.—Pathologist. Salary £200 per annum, with furnished apartments, board, attendance and washing.

DERBYSHIRE ROYAL INFIRMARY.—Resident Assistant House Surgeon, for six months. Salary £10. Apartments, board and washing provided.

EARLSWOOD ASYLUM FOR IDIOTS, Redhill, Surrey.—Qualified Practitioner. Salary £500, with furnished apartments in the building, together with coal and gas.

EAST LONDON HOSPITAL FOR CHILDREN, Glamis-road, Shadwell, E.—House Surgeon. Board and lodging provided.

GENERAL HOSPITAL, Birmingham.—Two Assistant House Surgeons, for six months. Residence, board and washing provided.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—House Surgeon. Salary £60 per annum, with board and lodging in the hospital.

GUEST HOSPITAL, Dudley.—Resident Medical Officer. Salary £100 per annum, with board, residence, attendance and washing.

HOSPITAL FOR WOMEN (THE LONDON SCHOOL OF GYNÆCOLOGY), Soho-square, W.—Clinical Assistants.

MORPETH DISPENSARY.—House Surgeon; unmarried. Salary £120 per annum, with furnished apartments, coal and gas.

ROCHDALE INFIRMARY AND DISPENSARY.—Resident Medical Officer (unmarried). Salary £80 per annum, with board and washing.

ROYAL PORTSMOUTH, PORTSEA AND GOSPORT HOSPITAL, Portsea.—Assistant House Surgeon, for six months. Board, residence and washing, and an honorarium of £15 15s. at expiration of term of office.

ROYAL SOUTH LONDON DISPENSARY, St. George's-cross, S.E.—Honorary Surgeon.

ROYAL SOUTH HANTS INFIRMARY.—Assistant House Surgeon. Board and rooms provided.

TAUNTON AND SOMERSET HOSPITAL, Taunton.—Assistant House Surgeon, for six months. Board, washing and lodging in the Hospital provided.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE, Cardiff.—Professor of Anatomy. Stipend £350.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE, Cardiff.—Professor of Physiology. Stipend £350.

VICTORIA HOSPITAL, Folkestone.—House Surgeon. Salary £80 the first year, with an increase of £10 each year for the two following years, together with board and residence.

WEST HERTS INFIRMARY, Hemel Hempstead.—House Surgeon and Dispenser, who shall also be Assistant Secretary, for two years. Salary £100 per annum, with board, furnished rooms, free light, attendance and washing.

Births, Marriages and Deaths.

BIRTHS.

BUTLIN.—On Jan. 7th, at Harley-street, W., the wife of Henry T. Butlin, F.R.C.S., of a son.

CARTER.—On Jan. 1st, the wife of Dr. H. B. Carter, at Moreton House, Lewisham High-road, Brockley, S.E., of a daughter.

CLEMOW.—On Jan. 4th, at Comeragh-road, West Kensington, W., the wife of Arthur H. Weiss Clemow, M.D., of a daughter.

ELLISON.—On Jan. 5th, the wife of Ernest H. Ellison, M.A., M.R.C.S., L.R.C.P., of Castleton, Sheffield, of a son.

GRIFFITHS.—On Nov. 27th, 1892, at Blayney, New South Wales, the wife of Ernest E. Griffiths, Government Medical Officer, of a son.

SHAW.—On Jan. 5th, at St. Thomas's-street, S.E., the wife of Lauriston E. Shaw, M.D., F.R.C.P., of a son.

WATSON.—On the 9th inst., at Hendre, Overton-park, Cheltenham, the wife of Deputy-Surgeon-General George Alder Watson, Bengal Army (Retired), of a son.

MARRIAGES.

DALZELL—BELL.—On Dec. 31st, 1892, at St. Andrew's, Chesterton, Cambridge, Anthony Dalzell, M.R.C.S., L.R.C.P., second son of the late Thomas Henry Dalzell, J.P., of Clifton Hall, Workington, to Flora, eldest daughter of the late Edward Bell, of the Manor House, Chesterton.

OGILVIE—HOUSTON.—On Jan. 5th, at George-square, Edinburgh, Dr. George Ogilvie, London, to Helen Hay, daughter of Deputy-Surgeon-General John Houston, Madras Army (retired).

RICKETTS—GUILDING.—On Jan. 3rd, at St. Laurence's, Reading, Surgeon-Captain W. S. P. Ricketts, of the Indian Medical Service (Bombay), to Agnes Hilda, only daughter of the Rev. J. M. Guilding, vicar of St. Laurence's, Reading.

WEBBER—MEW.—On Jan. 4th, at St. Stephen's, South Dulwich, Henry Woolmington Webber, M.D., eldest son of John Webber, M.R.C.S., of Mannamead, Plymouth, to Ada Marian, third surviving daughter of Capt. A. P. Mew, late of H.M. Bengal Army.

DEATHS.

BRATTON.—On Jan. 9th, at Hill House, Ewell, James Allen Bratton, M.R.C.S.E., L.R.C.P. Lond., M.A. Cantab, aged 32.

BRENNAN.—On Jan. 4th, at Ballycrehane, Tipperary, Henry Arthur Brennan, Surgeon.

BURROUGHS.—On Dec. 23rd, 1892, at sea, on his return from New Zealand, Thomas John Burroughs, M.D., of Crondall, Hants, aged 55.

CRANE.—On Jan. 7th, Charles Robinson Crane, M.R.C.S., of Cairn Ryan Lodge, Preston, Brighton, aged 38.

CURTIS.—On Jan. 8th, at Staines, Frederick Curtis, M.R.C.S., in his 94th year (formerly House Surgeon at St. Bartholomew's Hospital).

HARLE.—On Jan. 8th, Ezra Harle, M.R.C.S.E. and L.R.C.P. Edin., of Earlswood, Surrey.

HUTCHESON.—On Jan. 2nd, at Aberdare, J. D. Hutcheson, M.B. Glasg., L.R.C.S. Edin.

KERR.—On Jan. 3rd, at Worcester-crescent, Clifton, Benjamin Cowan Kerr, M.D., Brigade-Surgeon, Army Medical Staff, retired.

LAWSON.—On Jan. 5th, at Timaru, New Zealand, Bernard Sloane Lawson, M.R.C.S., L.R.C.P., aged 29.

LIDDON.—On Jan. 8th, at Church-square, Taunton, William Liddon, M.B., F.R.C.S., aged 57.

LITTLE.—On Jan. 5th, at 106, London-street, Reading, Thomas Selby Little, Surgeon.

SHAPLEY.—On the 5th inst., at Earlswood, Leamington Spa, Harry Thomas Shapley, M.B., M.R.C.S., in his 41st year. Deeply regretted by his sorrowing wife and children.

SMITH.—On Jan. 2nd, at his residence, Cobham, Surrey, Rowland Smith, M.R.C.S., L.S.A., aged 62 years.

IN MEMORIAM.

STRICKLAND.—On Jan. 12th, 1892, at New Bethesda, Cape Colony, Arthur W. Strickland, M.R.C.S. Eng., L.R.C.P. Edin., L.S.A., born Jan. 15th, 1852, at Kensington, London, dearly beloved husband of Frances Strickland. "Not dead, but sleepeth."

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan. 12th, 1893.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 6	30·24	E.	32	..	38	34	20	..	Overcast
,, 7	29·89	E.	31	..	..	36	29	·04	Overcast
,, 8	29·77	E.	35	34	..	38	30	..	Raining
,, 9	29·73	N.E.	38	37	..	40	35	·16	Overcast
,, 10	29·98	N.E.	37	36	53	42	35	·26	Overcast
,, 11	30·30	N.E.	35	33	44	39	32	..	Cloudy
,, 12	30·19	N.E.	37	36	..	38	34	·03	Overcast

Medical Diary for the ensuing Week.

Monday, January 16.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays, at the same hour.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; and on Tuesday, Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M.; and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2 P.M.; Thursday, 2.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.; and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M. Eye Department, 2 P.M.

LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital: 1 P.M., Mr. R. Marcus Gunn: External Examination of the Eye.—101, Gt. Russell-st.: 8 P.M., Dr. Galloway: Certain Points bearing on Malignant Growths.—Parkes Museum (Margaret-st., W.): 3.30 P.M., Dr. Louis C. Parkes: Water Supply.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road).—Mr. Lennox Browne: Polypus of the Nose.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. C. B. Keetley: On the Prevention of Shortening after Fractures.—Mr. J. D. Malcolm: Physiology of Death after Traumatic Fever: a Study in Abdominal Surgery.

Tuesday, January 17.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Skin Department, 1.45; Saturday, 9.15.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electrotherapeutics, same day, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars: 4 P.M., Mr. Jonathan Hutchinson: Acne and Allied Diseases. Bethlem Hospital: 2 P.M., Dr. Percy Smith: Hypochondriasis.—101, Gt. Russell-street: 8 P.M., Dr. Amand Routh: Version.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. N. Dalton: Multiple Papillomata of the Colon and Rectum.—Mr. J. Jackson Clarke: Cancers of the various Organs and Non-cancerous Cysts of the Breast due to Psorosperms.—Mr. G. H. Makins: Blood Tumour in a case of Hæmophilia.—Dr. S. W. Wheaton: Preparations from the Organs in a case of West African "Blackwater" Fever.—Dr. G. N. Pitt: (1) Thrombosis of Pulmonary Artery without Infarction; (2) Arterio-venous Aneurysm connected with Iliac Vessels at their Origin. Card Specimens:—Dr. F. C. Turner: Sarcoma of both Ovaries and of the Peritoneum in a Child.—Mr. G. H. Makins: Unusual Form of Meckel's Diverticulum.

Wednesday, January 18.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday and Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M. Dental Department, 9.30 A.M. Eye Department, 2 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. R. Douglas Powell: The Principles of Treatment in Phthisis.—Royal London Ophthalmic Hospital: 8 P.M., Mr. A. Quarry Silcock: Choroidal Disease, with Illustrative cases.—Central London Sick Asylum (Cleveland-st., W.): 2 P.M., Sir Joseph Lister: Antiseptic Dressings (this Demonstration only will be given in the Theatre of King's College Hospital).

EPIDEMIOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Kenneth McLeod: A Remarkable Epidemic of Dropsy.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Annual Meeting. Presidential Address by Dr R. Braithwaite.

Thursday, January 19.

ST GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. Ear and Throat Department, 9 A.M. Eye Department, 2 P.M.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road).—Dr. Dundas Grant: The Morbid Conditions of the Membrana Tympani.

LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-street: 4 P.M., Dr. Sturges: Illustrations of Chorea, its Nervous and Cardiac Signs.—National Hospital for the Paralysed and Epileptic: 2 P.M., Dr. Tooth: Anatomy of the Spinal Cord.—London Throat Hospital (Gt. Portland-st.): 8 P.M., Mr. W. R. H. Stewart: Examination of the Ear.

LONDON SKIN HOSPITAL (40, Fitzroy-sq., W.).—8 P.M. Mr. Augustus Barbord: Syphilis, Diagnosis and Treatment.

HARVEIAN SOCIETY.—8.30 P.M. Annual Meeting. President's Address; Soirée; Exhibition of "Doctor's Art."

NEUROLOGICAL SOCIETY OF LONDON (20, Hanover-square).—8.30 P.M. Annual General Meeting. Inaugural Address by Dr. Schäfer on "The Nerve-cell as the Basis of Neurology."

Friday, January 20.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Eye Department, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. J. Mitchell Bruce: Interesting cases of Phthisis in the Wards.—Bacteriological Laboratory, King's College, 11 A.M. to 1 P.M., Prof. Crookshank: The Microscope (Types of Bacteria).

Saturday, January 21.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 11 A.M., Dr. Theo. Hyslop: Melancholia.

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

PUBLISHER'S NOTICE.

IN order to facilitate the work of reference to the volumes of THE LANCET, we have arranged in the future to publish duplicate copies of the Index to each half-yearly volume in a form in which they may be subsequently filed or bound together.

We have had a large number of duplicate copies of the Index to the last half-yearly volume printed, and those of our subscribers who may wish to be supplied with loose copies can obtain the same (without extra charge) on making application to the Publisher of THE LANCET.

REGULATIONS CONCERNING PATENT MEDICINES ON THE CONTINENT.

ACCORDING to an American Consular report, which is referred to by a pharmaceutical contemporary, the regulations of several European countries concerning patent medicines are a good deal more stringent than those of Great Britain. In Austria-Hungary prepared medicines, whether patented or not, unless imported for druggists, require a special permit from the Customs authorities. All medicines and medical compounds are excluded from protection by the Austrian Patent Law, and the sale of such is permitted only to, and in, drug stores. In Belgium patent medicines can only be sold by apothecaries or other authorised persons, and must bear the seal of the

seller, who assumes the responsibility of the product. In Denmark the sale is confined to apothecaries. France entirely prohibits the sale of secret medicines, unless they are approved by authority and the formula is inserted in the official formulary. In Germany all proprietary medicines must be retailed by a regularly sworn and licensed apothecary, who is responsible for their effect on the patient; but the most serious restriction is the prohibition of advertisements of patent medicines in public journals when such medicines are made by a secret formula or process. This law is rigorously enforced in Baden and Prussia, but less stringently so in Wurtemberg, Bavaria and some parts of Northern Germany, while in Saxony the authorities exercise the right of prohibiting the sale altogether. In Italy the composition of a patent medicine must be approved by the Board of Health. No patent medicine is allowed entry into Russia unless special permission is on each occasion obtained from the Medical Department of the Minister of the Interior. If, after careful examination, it is proved that the production of such medicines requires elaborate work and expensive apparatus, it is allowed entry subject to a duty of about 1s. 8d. per pound avoirdupois provided such medicines are regarded as beneficial and are compositions durably preserved. In Sweden, Switzerland and Turkey there are but few restrictions.

Mr. Fred. W. Woolcake.—1. The medical degrees of Melbourne are registrable in the United Kingdom. 2. The registered holders of them, we should imagine, would be qualified for examination for medical appointments in the army and navy like other registered persons; but we are not aware that any such colonial graduates have presented themselves for examination. 3. A gentleman holding diplomas in medicine and surgery from the Melbourne University can practise in both branches in the United Kingdom. In the sense of practising medicine he will be a "physician," though not so in the restricted sense of practising exclusively as a medical consultant and of being a Member of a College of Physicians. He is of course entitled to call himself a surgeon.

Mr. F. R. Humphreys.—We know of no society for helping such a case.

"INFECTION AND CONTAGION."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Dec. 31st, 1892, p. 1541, the application of the above terms is discussed, and thereby we are given to understand that the word "contagion" is a somewhat convertible term with "contact"—viz.: "It would conduce to clearness if the word 'contagion' were restricted to its precise signification of transmission by actual contact." It seems difficult to consider why it is assumed that the words "contagion" and "contact" should have any signification in common, unless indeed that to some there may be a phonetic link in the words. However, it is no uncommon error for persons to consider that the substantive "contagion" has some Latin root justifying the applicability of the term so as to imply contact; such, however, there seems no ground for maintaining, nor, indeed, do we find that the earlier writers who adopted the word had any such indistinct or confused meaning for it. *Contactus* and *contingo* have no affinity with *contagio* ("an effect"). Further, as regards the use of the word: "To limit contagion to the propagation of disease by contact only would be to disallow the more comprehensive use of the term in our best authors." (Hancock, "Laws of Pestilence," p. 24.) This author goes very fully into the meaning and use of these terms (chapter iii., on the use of the words "contagion," "infection" &c.). We cannot go very far amiss if we understand contagion to be a property of a disease capable of infecting a place, person or thing. To quote again: "Consonantly with these views it appears to me, therefore, that contagion should be entirely confined to that subtle matter, effluvium or emanation (sometimes called contagious principle, particles or atoms) which, generated in the course of a distemper and passing from a person diseased, whether by contact, near approach or the medium of infected materials, and whether in a pure or vitiated air, is capable of producing a similar disease in one that is sound or acting as an exciting cause in one already predisposed." (Ibid., pp. 23, 24.) Infection may be understood as the result or effect of contagion whether that effect be in a place, person or thing. "And yet the common usage of the word 'infection' would authorise us in saying the 'infection infects,' a phrase that has no parallel in our language." (Ibid., p. 25.) It is not an uncommon question for medical men to have propounded to them by patients or others a correct definition of the terms in question, and I think to unprofessional minds a very practical and simple definition is that infection bears just the same relation to contagion as smoke does to fire.

I am, Sirs, yours truly,

Dublin, Jan. 9th, 1893. C. E. MACNAMARA.

"WATCHMAKERS AS OCULISTS."

To the Editors of THE LANCET.

SIRS,—With reference to a paragraph which appeared in THE LANCET under the above heading, we beg to say that no instruction through the medium of a medical man has or will be given on our premises.

We are, Sirs, yours faithfully,

London, Jan. 10th, 1893. J. RAPHAEL AND CO.

THE ETIQUETTE OF CALLING.

A CORRESPONDENT writes: Dr. ——, in practice at ——, takes into partnership Dr. ——. What is the etiquette as regards the latter as to calling on practitioners—does the usual custom of the new-comer calling on the resident practitioners prevail or not?

*** Certainly. The fact of partnership does not alter the etiquette of the case.—ED. L.

Mr. C. T. B. Maisey (Scarborough Hospital) writes:—"I should be greatly obliged if you will kindly give me your opinion on the following case. An old man of seventy-seven years was knocked down in the street and sustained a 'fractured femur' (neck of left), for which he was brought to hospital the same day (Nov. 16th, 1892). After remaining in hospital for a period of five weeks he went out on his own account. He then obtained a dispensary ticket (or rather two days afterwards) and I saw him at his own home and found him in the same condition as when leaving hospital. After being at home for five days a hernia (scrotal) which he had had for some twelve years became strangulated. I advised his removal to hospital and helped in conveying him there the next day. He was operated on the same evening and died on the fifth day after from peritonitis and exhaustion. I gave a certificate in accordance with above. The registrar refused it and informed the coroner, but he was not satisfied with that, and told the friend I had no right to give a certificate. An inquest was held and the jury unanimously agreed that the cause of death was as certified by me, and this quite apart from the accident and in spite of a fairly severe cross-examination on the part of the coroner. The members of the staff at the hospital whom I have taken the liberty of asking say I had a perfect right to give a certificate. I shall feel greatly obliged if you will give the valuable opinion asked for."

*** We do not see the reason for an inquest in this case. We think the certificate should have been signed by the resident or operating member of the hospital staff, as the last in attendance, for the hernia and its consequences.—ED. L.

Subscriber will find the statistical information which he desires in the Registrar-General's Fifty-third Annual Report (see Tables 17, 18, and 16), published by Eyre and Spottiswoode, price 1s. 3d.

Mr. F. Tyrrell.—We regret that the grievance referred to should exist, but possibly the publication of our correspondent's letter might increase it instead of remedying it.

AN APPEAL.

To the Editors of THE LANCET.

SIRS,—I shall feel obliged if you can find a corner in your next issue for the enclosed appeal. The case is an urgent one as Mrs. Ginders is left practically without means of subsistence. There are many old friends and fellow students of Mr. Ginders whose present residence is unknown to the committee and whom consequently we can only reach through your columns.

I am, Sirs, yours faithfully,

St. Mungo's College, Glasgow. HENRY E. CLARK.

"By the wreck of the Anchor Line ss. *Roumania* off the coast of Portugal on Oct. 28th, 1892, Alfred Gerard Ginders, L.R.C.P. and S.Ed., the surgeon to the ship, lost his life. He left a widow totally unprovided for, who, although willing to work for her living, is rendered unfit for any active employment by tibial ostitis, from which she has suffered at intervals since childhood. Mr. Ginders had only obtained his diplomas in July last and had consequently no opportunity of making any provision whatsoever for his wife. A small committee has been formed for the purpose of raising such a sum of money as may enable Mrs. Ginders to earn a living in some light employment suitable to her condition of health. The committee consists of—Henry E. Clark, Professor of Surgery, St. Mungo's College, Glasgow; John Macintyre, M.D., Lecturer on Diseases of the Throat and Nose, Glasgow; Quintin M'Lennan, M.D., Assistant Surgeon, Glasgow Royal Infirmary (treas.). Subscriptions will be received by Dr. M'Lennan, 191, Pitt-street, Glasgow, and a direct acknowledgment sent."

ERRATA.—On page 36, column 1, line 21 of our leading article last week on "The University of Edinburgh and Special Diplomas" "the Act of 1858" should read "the Act of *1886*."—We regret that by an accident the figure numbered 3, in illustration of Dr. John Anderson's article on "Clinical and Therapeutical Notes on Two Cases of Aneurysm," published in our last issue, was wrongly placed. It was, as the context obviously shows, intended to illustrate the position of the aneurysm in the second case.

During the week marked copies of the following newspapers have been received:—*Liverpool Daily Post, Leith Burghs Pilot, Cambridgeshire Weekly News, Eastern Morning News, Hull Daily Mail, Carlisle Patriot, Louth Times, Liverpool Mercury, Bradford Observer, Louth and North Lincolnshire Advertiser, Weekly Free Press and Aberdeen Herald, City Press, Leeds Mercury, Food, Drugs, and Drink Journal, Bristol Mercury, Mining Journal, Reading Mercury, West Middlesex Standard, Local Government Chronicle, Local Government Journal, Sunday Times, West Middlesex Advertiser, Citizen, Le Temps (Paris), Weekly Scotsman, Bradford Daily Argus, Kelso Mail, West Sussex Gazette, Hertfordshire Mercury, Dundee Advertiser, Western Morning News, Manchester Courier, Scotsman, Northern Whig, Huddersfield Chronicle, South Wales Daily News, New York Herald, Pioneer Mail, Times of India, Birmingham Argus, West Lothian Courier, Law Journal, Optician, Midland Evening News.*

Communications, Letters &c. have been received from—

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